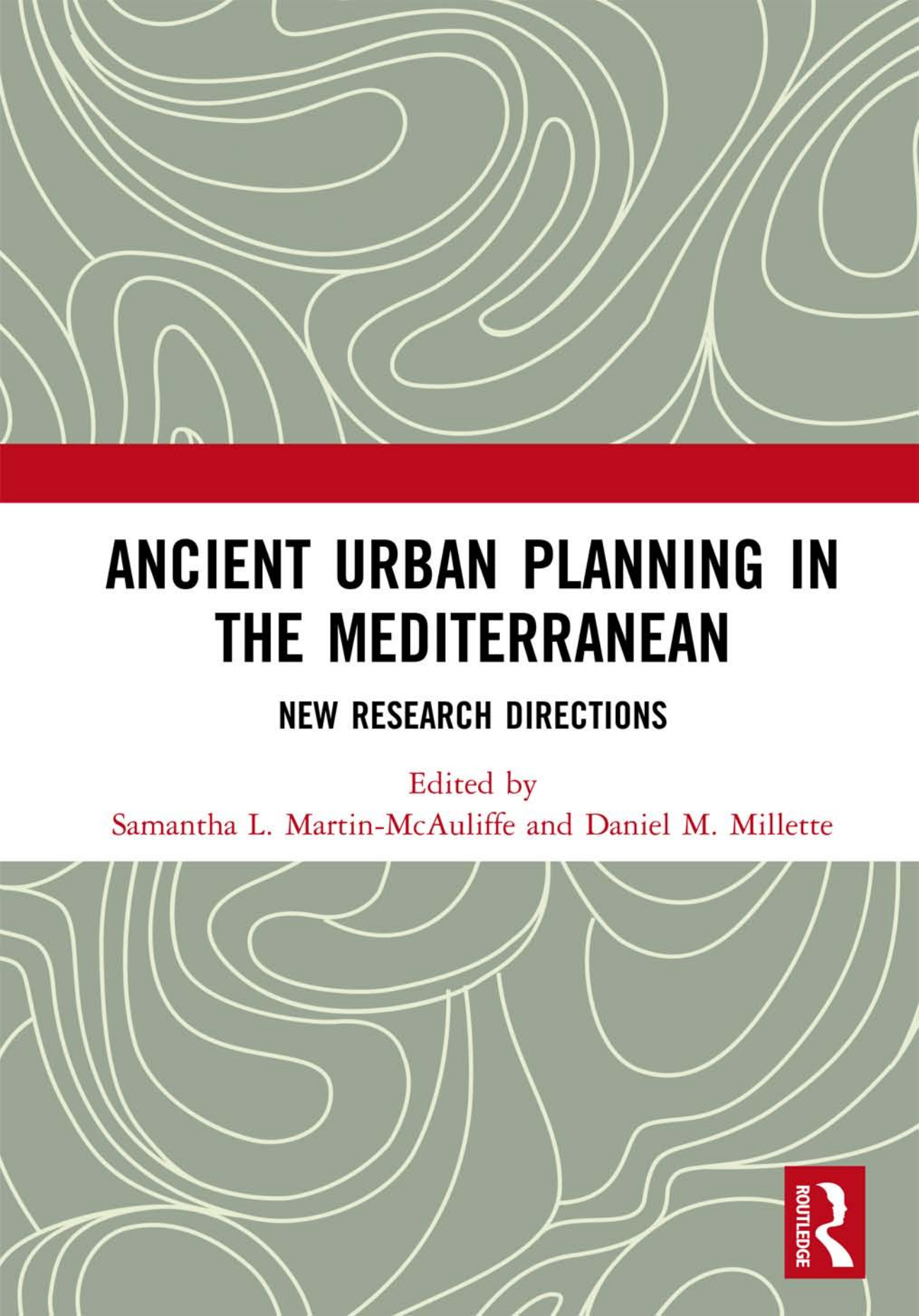




ANCIENT URBAN PLANNING IN THE MEDITERRANEAN

NEW RESEARCH DIRECTIONS

Edited by

Samantha L. Martin-McAuliffe and Daniel M. Millette



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Ancient Urban Planning in the Mediterranean

Ancient Urban Planning in the Mediterranean assembles the most up-to-date research on the design and construction of ancient cities in the wider Mediterranean. In particular, this edited collection reappraises and sheds light on ‘lost’ Classical plans. Whether intentional or not, each ancient plan has the capacity to embody specific messages linked to such notions as heritage and identity. Over millennia, cities may be divested of their buildings and monuments, and can experience periods of dramatic rebuilding, but their plans often have the capacity to endure. As such, this volume focuses on Greek and Roman grid traces – both literal and figurative. This rich selection of innovative studies explores the ways that urban plans can assimilate into the collective memory of cities and smaller settlements. In doing so, it also highlights how collective memory adapts to or is altered by the introduction of re-aligned plans and newly constructed monuments.

Samantha L. Martin-McAuliffe’s main teaching and research interests lie in antiquity, especially the architecture and urbanism of Classical cities. She has worked extensively within archaeological excavations in Greece (Agora Excavations, Methone Archaeological Project) and Albania (Lofkënd Archaeological Project). Since joining the faculty at University College Dublin in 2007 she also has developed several projects on the connections between food and architecture. In 2016, she published *Food and Architecture: At the Table* (Bloomsbury). Samantha Martin-McAuliffe completed her PhD in Architecture from the University of Cambridge in 2007. Before that she received an MPhil in the History and Philosophy of Architecture, also from Cambridge. She was a Fulbright Fellow to Greece, and is a graduate of Smith College.

As a Registered Professional Archaeologist, **Daniel M. Millette** maintains a research program on ancient planning techniques and their relevance within contemporary planning models. He has excavated in Gaul and today’s North Africa. Millette has published on Vitruvius, the Roman theatre, the collective memory (in the classical urban context) and Roman planning. He has also directed and co-directed several studies abroad sessions in Archaeology and Architectural History in Rome. At the School of Architecture and Landscape Architecture at the University of British Columbia, Millette taught Theory and Environmental Design History; he presently teaches at Carleton University within the History and Theory of Architecture program.



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and Daniel M. Millette

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1 The order of cities

Ancient urban planning in the Mediterranean

Samantha L. Martin-McAuliffe

How does one gauge the order of a city? Writing in the third century BC, Heraclides Criticus complained that the visual character of Athens belied the city's august reputation. "The road to Athens is a pleasant one, running between cultivated fields the whole way," he wrote, "[but] the city itself is dry and ill supplied with water. The streets are nothing but miserable old lanes, the houses mean, with a few better ones among them. On his first arrival, a stranger could hardly believe that this is the Athens of which he has heard so much."¹ Despite its fleeting nature, the general message of the passage is clear: to a visitor, Athens appeared faded and down-at-heel. In the original Greek, the only explicit reference to the plan of the city is the phrase *κακῶς ἐρρυσοτομημένη*, literally meaning 'poorly divided'. This is lost in the above translation but it is without doubt meant to be understood as a comment on the layout of the city's streets. Even though no further deliberation, much less sustained analysis, of Athens' plan is provided in the text, it is regularly cited in modern accounts as a critique on the urban order of the city. Its prevalence can largely be explained by the fact it is one of the rare surviving accounts of Athenian urbanism in literary testimonia. Heraclides is, therefore, the inevitable option for anyone seeking a first-hand description of the spatial layout of ancient Athens, and by extension this also means that the passage has received ample – perhaps disproportionate – attention.

The problem here does not lie in the presumed validity of Heraclides' assessment. Athens may very well have appeared shabby to an out-of-town visitor in the Hellenistic period. Rather, the point to take from this is that a few lines of highly impressionistic fragmentary evidence are habitually used to capture and convey the order of the city. The gravitational pull of the passage has resulted in Athens being typecast as an irregular and even disorganised city, especially in comparison to towns that developed orthogonally. It can be argued that this situation has contributed to, if not directly fostered, a simplistic approach to how we study urban planning in antiquity in the Mediterranean on a wider scale. On the whole, scholarship predictably resorts to classifying both Greek and Roman cities into one of two categories: planned (uniform, orthogonal, grid layout) and unplanned (irregular, organic, non-geometric).² While such a dichotomy can be initially beneficial when preparing an overview or synthesis of a very large number of sites, it is ultimately a modern academic invention that underplays vital elements and conditions of urban order, such as monumentality, viewpoints or vistas and architectural reuse or recycling.³

It is worthwhile pointing out that Heraclides did indeed provide an account of many positive things about Athens, from the productive hinterlands to its rich array of architectural monuments.⁴ Also, following the initial criticism of the city, the commentary

praises the Odeion in the Agora, the Parthenon and the Temple of Olympian Zeus in quick succession. Yet they are not merely enumerated like attractions in a guidebook. They instead are characterised in ways that effectively transcend the conventional division of planned versus unplanned urbanism. An instructive example of this is the commentary on the Parthenon, which describes the temple as both ἀπόψιον (far-seen, conspicuous) and ὑπερκείμενον (lying or being situated above) the theatre, thereby highlighting the interrelatedness of architectural monumentality and long-range visibility or viewpoints. It is not clarified whether the theatre in question is the Odeion or the Theatre of Dionysus on the south slope of the Acropolis; both are apropos to the description.⁵ Nevertheless, it would be difficult to explain how this situation fails to demonstrate highly conscious and controlled urban planning. What is surprising, however, is that these sections of the commentary by Heraclides are seldom quoted in scholarship. Their omission only serves to reinforce the impact of the hackneyed critique on the city's layout.

Heraclides also indirectly casts some light on another convention of modern scholarship; that is, the representation of cities through a flat, two-dimensional plan. Of course, it was impossible in antiquity to depict a city as a unified whole. As such, the description of Athens in Heraclides is structured as an eyewitness account that is directly involved with the landscape. It seems to unfold through the passage as if the reader is joining the narrator on walk from the outskirts of the city into the urban centre. From the standpoint of a Hellenistic visitor, Athens was already a palimpsest, a mixture of time-honoured monuments as well as new buildings that were rising before his very eyes. Equally important to Heraclides were features of the natural landscape, particularly groves and gardens, as well as ephemeral events like festivals. Although we plainly recognise that a visitor in antiquity read a city from the perspective of a pedestrian, in the present day it is difficult not to conceptualise an urban plan from overhead, either as a two-dimensional plan or through an omniscient, bird's-eye-view. This practice, in fact, is so dominant and entrenched that we seldom pause to acknowledge, much less reappraise, it. While it is important to produce lucid drawings that help us examine and visualise the form of a city, it is equally imperative to be cognisant to how architectural plans embody a highly privileged vantage point that was simply unattainable in the pre-modern period. Moreover, such drawings can become static set-pieces that are detached not only from an evolving process of building and rebuilding, but also transitory events such as religious processions and political gatherings. We therefore tend to read buildings and their contexts in a crystallised moment instead of understanding them as structures with overlapping phases of development, use and decay. It is also crucial to remind ourselves that landscapes and indeed the wider topographic conditions of a city are literally flattened in an architectural plan, their conditions and characteristics reduced to outlines, labels and annotations. Athens is no exception to this phenomenon. On the one hand, generations of scholars will continue to benefit from the magisterial work of John Travlos, whose cumulative plans of the city remain a touchstone for the study of ancient urban planning.⁶ Yet the authority and clarity of these diagrams systematise the city into a neat, coordinated grid that diminishes informality, ambiguity and clutter.

For the modern viewer, the white spaces of urban figure-ground diagrams tend to be interpreted as formless voids and thus also by extension empty and separate places.⁷ This perception betrays both the Greek and Roman understanding of the civic realm, where the meaning of architecture was often dependent upon the interplay of

relationships between structures. In the case of Athens, Tasos Tanoulas elaborates this to consider something that many scholars of architecture fail even to recognise: that Greek civic space in particular is not just about the architecture; it is also about how people inhabited that space.⁸ The central realm of the Athenian Agora, for example, was not open in a vacant sense at all, but rather filled by polis itself. This was the place of speech, and the parvis of debate and interchange. Before the construction of the Pnyx it was the location of the assembly; afterwards it remained always the nexus of dialogue and debate, both formal and informal. In short, the messiness of an ancient city is often lost in the numerical fidelity of the scale plan or model, both of which treat buildings as isolated phenomena.

The two-fold topic encapsulated in this opening discussion of Heraclides – that is, the reappraisal of how we perceive and assess ancient urban planning through both word and image – is the cornerstone of the collection of essays presented in this volume. The groundwork for this book was laid in a session which the editors organised in 2012 at the International Meeting of the European Architectural History Network (EAHN). The session, entitled “The Classical Urban Plan: Monumentality, Continuity and Change,” was devised as a platform for challenging the standard labels of planned versus organic cities. While the orthogonal urban grid constituted a key theme of the session, several of the assumptions that normally underpin this formal approach to planning were sidelined, and in some cases countered. Overall, the contributions sought to inform theoretical frameworks, thereby broadening as well as reassessing the existing discourse on ancient urban plans.

In particular, many of the contributions from the 2012 EAHN session aimed to shed light on what may be described as ‘lost’ urban and rural plans. Greek and Roman monuments have been disappearing from the collective psyche for millennia. As soon as a new Roman emperor assumed power, for example, the architectural landscape was reshaped and adapted to suit the new ruler. More recently, however, the rapid acceleration in the loss of collective memory through the obliteration of monuments has made clear that ancient architecture as we have come to know it is moving away from the physical realm to the imaginary psyche. Yet, one aspect of it embodies a remarkable tenacity and staying-power: the urban plan. Even where ancient architecture has been decimated to make room for new urban and at times, rural spaces, substantial portions of an earlier city plan can be retraced and the wider organisational layout can, to varying extents, be recovered and examined.

We know that individual monuments as well as monumental architectural ensembles can today be harnessed in the service of memory scripting, just as it was – as Paul Zanker so brilliantly showed – in Roman Republican times. Can the same approach be extended to the planning grid? Does meaning change as the plan is altered? Does memory change? Can an ancient plan reflect a new cultural, political or social order? Whether intentional or not, each Classical plan has the capacity embody specific messages linked to such notions as heritage and identity. While this is arguably most significant when considering the formal orthogonal grid, it cannot be emphasised enough that the weight that this infrastructure can bear in terms of cultural meaning has been underappreciated by current scholarship. Not an insignificant number of the studies presented here disenfranchise the orthogonal grid as the dominant criterion for a well-planned city. As many of these questions and concerns took root and developed in the volume, they simultaneously fuelled a broader yet closely related discussion of how we document ancient cities. The traditional, two-dimensional architectural

plan continues to hold sway as the principal device for illustrating and studying early settlements. Yet the benefits of employing view-sheds and enhanced ground-level perspectives are gaining traction within the academy. An equally significant topic which emerged from the EAHN session concerned how traditional archival material has been morphed over the past decade into new sets of data that can reveal information otherwise invisible to researchers in ancient architectural history.

The chapters contained in this volume consider material spanning from early Greece to modern Rome. While some provide accounts of the lived experience of a city or particular type of urban ensemble within a finite period of time, others consider the *longue durée* of a given place, thereby taking account of many phases of development, adaptation and re-use. In his study of the early urbanisation of the Greek West, Spencer Pope explains how the grid was deployed as a power broker in the act of place-making. His contribution to this book, entitled “Urbanisation in Inland Sicily: Acculturation on the Periphery of the Greek World,” argues that the process of dividing territory was, in certain circumstances, an expression of political dominion and authority. For example, during the re-founding of Naxos by Hieron, the tyrant of Syracuse, the town grid was not merely altered but comprehensively redeveloped, thereby producing an entirely new urban form that had little relation to the earlier city. Indeed, within scholarship on antiquity, the term urban planning typically applies to large-scale designs and layouts, yet new studies are beginning to shed light on how small-scale or modest interventions underpinned and even gave rise to the monumentality of a city. In his discussion of Naxos, Pope describes how a series of stone bases are situated at the southeast corner of each intersection of the city. The precise function of enigmatic objects remains an open question, but the totality of their presence, as Pope argues, transforms a grid system into a kind of landmark. The reciprocity between macro- and micro-scale factors in urban planning is also a defining feature of Mantha Zarmakoupi’s chapter, “The Urban Development of Late Hellenistic Delos.” This contribution proposes an alternative method for studying Greek urbanism, one that counters the top-down approaches that prioritise broad or large-scale interventions. In particular, it draws parallels with contemporary models, especially those within architecture, that examine how economic and social factors, both large and small, influence the built environment in the present day. Delos was renowned as a hub for trade, yet Zarmakoupi argues that the city folded commercial activities into domestic settings rather than invest in large-scale infrastructure projects. Houses were adapted, altered and transformed in order to accommodate the rapid expansion of the economy. It suffices to say that representing these kinds of changes on two-dimensional city plans and models presents many challenges, and this is why they are often overlooked.

Several chapters in this volume consider the scenographic dimensions of ancient urban plans, thereby permitting the reader to parachute into a city and consider its texture from the point of view of a pedestrian. In her study of Greek public space, Barbara Sielhorst examines how architecture can be used as a monumental backdrop that frames, sets up visual prospects and gives prominence to honourific sculptures. Her contribution, “The collective image of a city: structure and meaning of Hellenistic agorai,” brings to the table many case-studies from a wide geographic area. This approach highlights commonalities in the form and design of squares, but it also shines a spotlight on one important paradox: As the architecture of the Greek agora, in particular its stoas, became more uniform, the connection between the function of buildings and their attendant public space diminished.

A highly regular, orthogonal plan does not necessarily yield a well-ordered city. However, a grid-iron plan may serve as a scaffold onto which a community can project symbolisms, values and memories. Ahmet Çinici provides a close reading of this precise situation in his chapter, “The memory remains: non-verbal symbolic communication and the planning grid at Pednelissos.” Although the grid organised and regulated the built environment of Pednelissos, Çinici argues that the order of the city derived from how buildings were inserted into this framework in order to evoke or trigger symbolic messages. A great deal of this study considers how an ancient visitor would have encountered such monuments along processional ways. Through what he terms a ‘loosely applied grid’, the streets of Pednelissos embodied a series of views, approaches and vistas that not only gave structure to civic life, but also showcased the community. For instance, one major street commences outside the city walls, leads past the necropolis and then passes into the city via a gate, beyond which stands a temple (in later periods, a church), finally arriving at the agora. Çinici contends that by following such a route, an observer in antiquity would have witnessed key civic, religious and economic characteristics of the city. A similar approach to reading a city is offered by Lynda Mulvin in her chapter, “Cyrene and Apollonia: the Classical urban plan as a measure of opposites.” This contribution traces the urban transformation of two cities in Roman Libya, paying particular attention to the visual impact of their overall plans and reciprocity with the given landscape. In the example of Cyrene, the Hellenistic orthogonal plan could be understood less as an imposition of rigid order and more as a framework that helped unify a steep and constricted physical setting. This kind of development is to be expected, but what is interesting here, however, is the transformation of the city in comparison to its neighbour (and original port), Apollonia. Although it also was organised along a grid, Apollonia ultimately abandoned – yet did not obliterate – its formal plan in the Christian period in order to provide a new route-way that allowed for processions between churches; the order of the city was engendered by new ritual.

Daniel Millette’s chapter, “Privileged topography: Vitruvius and the siting of Halicarnassus,” emphasises two notions: First, the plan-topography of the city can be privileged, memorable and exemplary, all in spite of challenging locations, and our possible ‘mis-aligned’ views of it. And second, the links of the site to Vitruvius’ architectural and planning imagination are examined in closer detail. While the two notions are developed under separate headings, they overlap and the conclusion proposes a reason for Vitruvius’ very deliberate and detailed references to the city. The point is made that topography itself offered advantages that, blended with what could be called a *loose* grid, enabled a dynamic and defensible civic assemblage that would have allowed and inspired any urban participant or visiting outsider.

Jessica Ambler’s chapter, “Razed or Raised?: echoes of the Punic city in Roman Carthage” represents the second contribution focussing on North Africa in this volume. Like Cyrenaican Apollonia, the rebuilding of Carthage did not expunge the pre-existing fabric and organisation of the city. The Byrsa Hill, Ambler argues, was a physical and metaphorical centre for both the Punic city and its Roman incarnation. Other elements of the earlier Punic plan, such as the coastal orientation, also endured. A remarkable feature of Punic Carthage was its staying power within the Roman cultural imagination. As Ambler attests, the city plays a crucial role in Virgil’s *Aeneid*,

where the two versions of Carthage merge. Although the Punic city was superseded by Augustan Rome, it remained a paradigmatic capital city.

The final two chapters of this volume concern Rome itself and a neighbouring town, Albano. Flavia Marcello employs a combination of art historical methodology and architectural theory to examine the overarching ideological programme of Flavian Rome. Her chapter, “Triumph, power and providence in Roman town planning: the Golden Age of Flavian Rome,” explores how, in the second half of the first century AD, the urban design of Rome again underwent a profound transformation. Rather than examining individual monuments as set-pieces, this study makes a case for understanding Rome itself as stage set. As such, the order of the city would reveal itself as an ancient observer engaged with the urban plan by winding through the streetscape, encountering vistas and spectacles, including processions.

Fittingly, this book concludes with a study of a small town whose structural fabric reads like a textbook of planning history. In “Albano: *castrum* to town,” Allan Ceen traces the development of a settlement from its ancient beginnings as a *castrum* built by Septimius Severus through to the present day: Classical, Medieval, Renaissance and Baroque modifications and alterations to the form and shape of the town are all in evidence. While the rectangular plan of the military camp clearly influenced the later iterations of Albano, an enduring feature of the town is its connection to and relationship with the Via Appia. As Ceen explains, the *castrum* developed parallel to the highway, and in the Medieval period, the route remained the key artery in an expanded street system – a grid. Notably, Renaissance Albano witnessed the development of a *trivium* – a three-pronged street complex – within the area of the *castrum*. These streets ran toward, but did not join, the Via Appia. Nonetheless, this historic armature remains to this day the main thoroughfare, and thus ordering device, of the town.

Notes

- 1 Translated by J.G. Frazer, *Pausanias's Description of Greece* (Cambridge: Cambridge University Press, 2012), i, xliii. To clarify, the text was formerly attributed to Pseudo-Dicaearchus. See the fragments of the Pseudo-Dicaearchus that are collected in C. Müller, *Geographi Graeci Minors*, Vol. 1 (Paris: Firmin-Didot, 1882), 97–110. See also J. McInerney, “Heraclides Criticus as an Aesthetic Value: Ancient and Modern Reflections,” in *Aesthetic Value in Classical Antiquity*, ed. I. Sluiter and R. M. Rosen (Leiden: Brill, 2012), 243–264.
- 2 Typical examples include F. Castagnoli, *Orthogonal Town Planning in Antiquity* (Cambridge, MA: MIT Press, 1971) and J. Owens, *The City in the Greek and Roman World* (New York: Routledge, 1991).
- 3 This dichotomy has been flagged more generally in A.T. Smith, *The Political Landscape: Constellations of Authority in Early Complex Societies* (Berkeley, CA: University of California Press, 2003), ch. 5. See also H. Carter, *An Introduction to Urban Historical Geography* (London: Edward Arnold, 1983), 10.
- 4 Notably, this was taken into account in a paper given by Charalambos Bouras in 1988 at the Internationalen Kongresses für klassische Archäologie (Berlin). The paper was subsequently published in *Akten des XIII. Internationalen Kongresses für Klassische Archäologie*, Berlin, 24–30 Juli 1988 (Mainz am Rhein: P. von Zabern, 1990), 267–74, especially p. 268.
- 5 Other monuments on the Acropolis played important roles in setting up viewpoints as well. The Propylaea, for example, framed a view toward Salamis. See S.L. Martin-McAuliffe and J.K. Papadopoulos, “Framing Victory: Salamis, the Athenian Acropolis, and the Agora,” *Journal of the Society of Architectural Historians* 71, no. 3 (2012), 332–61.
- 6 J. Travlos, *Poleodomikē Exelixis tōn Athēnon* (Athens: Ekdoseis Kapon, 1960).

- 7 This is why the map of Rome by Giambattista Nolli (1748) still remains a pioneering exception to the conventions of modern cartography. The innovative rendering of solids and voids in the plan enables buildings and their attendant spaces to relate as one dynamic entity.
- 8 T. Tanoulas, "Greek Concepts of Space as Reflected in Ancient Greek Architecture," in *Concepts of Space, Ancient and Modern*, ed. K. Vatsyayan (New Delhi: Indira Gandhi National Centre for the Arts, 1991), 160.

2 Urbanisation in inland Sicily

Acculturation on the periphery of the Greek world*

Spencer Pope

The establishment of Greek foundations or *apoikiai* in Sicily in the second half of the eighth century BC provided the opportunity for placemaking on an unprecedented scale. While the creation of a new city was not an uncommon event in the Geometric period—synoicisms, re-foundations, and sub-foundations accounted for many of them—this moment of expansion provided the broad occasion to create new political enterprises and a new built environment that responded directly to the needs of the community. The numerous *apoikiai* dating to the eighth and seventh centuries BC extending across southern Italy and Sicily each had their own internal development shaped by their political formation, trade and connectivity, civic economy, and relationship with the indigenous population. However, elements of the process of creating the built environment conformed to a set of practices repeated across the centuries. The ensuing praxis formed the underpinning of urbanisation in western Greece throughout the Archaic period. An investigation of urbanism at the periphery of the Greek world reveals that these traditions in urbanisation were implemented at sites of non-Greek origin following the expansion of Greek presence into the island's hinterland.

One guiding principle in the foundation of the Greek city is the *dasmós* or primary division of space. The initial division of territory within the Greek foundations was between the *asty* and *chora*; this distinction differentiated the urban core from the surrounding agricultural territory that would support the city. The *asty* was the central space of the polis and the urban area in which the city-state developed. Conventionally the *asty* was divided again into areas designated (*temēn*) for three separate functions: private (residential), civic, and religious.¹ The largest was the domestic area subdivided into individual private plots of land. In western Greece, this area was formed following an initial *dasmós* that created housing plots aligned on parallel easements; these strips of land were then intersected by perpendicular thoroughfares. These facilitated movement through the *asty* itself and created the basis for the regular urban grid employed in most of the Greek cities of Sicily. In this fashion, the earliest division produced a series of rectangular precincts that were subsequently subdivided house lots (*oikopeda*). These initial equal-size lots developed into the functional *asty* with the creation of regular precincts: the city blocks containing the *oikopeda* arranged around the agora and punctuated by sanctuary space. Within the earliest urban grids, such as Megara Hyblaia and Syracuse, the agora is located centrally within the residential area. However, by the Classical period, the agora could be either similar (Selinus, Akragas, Eloro) or in a non-central position, closer to the end of the residential area (Naxos, Himera, Kasmenai).² Designated religious space was commonly placed near the confines of the *asty*; these demarcated the furthest extent of the residential area and differentiated it from

the surrounding agricultural territory.³ In this way they marked the transition from a central space to an area of special use. The arrangement of sanctuaries in this way has been described as a “sacred belt” enclosing and protecting the living area, as at Naxos.⁴

The circuit wall grew in proportion to the communities it protected. Among fortified sites of the Early Iron Age, over one-half had intramural space of less than three hectares, and nearly all are smaller than six hectares. Among seventh century fortifications, an enclosed area of five to seven hectares was most common.⁵ The circuit area steadily increased across the sixth century BC, with the majority of walls enclosing 35–80 hectares. At Naxos, the foundations of a Bronze Age wall were reused in the early Archaic period with additional masonry construction: the plentiful volcanic basalt obviated the material for the walls which likely had no mud brick portion. Also in Sicily, Megara Hyblaia was protected by a seventh century earthen rampart; the fortification measured six to eight m wide and its original height is reconstructed at circa six meters. Earth was excavated from directly in front of it, creating a ditch that added to the impenetrability of the circuit wall. The necropolis was traditionally placed outside of the city wall, in many cases just beyond this physical barrier. The *chora* is the agricultural territory beyond the *asty* and was the site of production of agricultural goods that supported the city. The survey of the countryside at Metaponto and Chersonesos reveals the *chora* was already divided into parcels in the Archaic period in a manner not dissimilar from the *asty*, and likely distributed in the same manner as urban house plots in the *asty*, although the nature of land tenure remains unclear.⁶

The foundation of an *apoikia* was led by an *oikist* who directed the creation of the polis, the division of territory, and ultimately the articulation of the built environment. Guiding the process of site formation bestowed the leader with an heroic, godlike status, worthy of veneration.⁷ The role of *oikist* is alluded to in the *Odyssey*, in which King of the Phaiakians leads his community in the act of founding Scheria, “From thence Nausithoos, the godlike, had removed them [the Phaiakians], and led and settled them in Scheria, far from men that live by toil. About the city he had drawn a wall, he had built houses and made temples for the gods, and divided the ploughland.”⁸ The distribution of farmland appears to be of primary importance, and the urban arrangement emulated the regular division of the *chora*.⁹ The duties and achievements of the *oikist* are also praised by Pindar as the poet celebrates the achievements of Battos, the founder and first king of Cyrene, whose notable works include building the sacred road, instituting festivals, and founding precincts of the gods.¹⁰ Little else is known on the theory of urban planning from its earliest applications but numerous references appear in the Classical period: Aristotle’s *Politics* names a few notable theorists, including Hippodamos of Miletos, who is described both as a *met-erologos*, a philosopher, and an architect. Thus he may have concerned himself with the functioning of the city as well as its physical layout, and the latter was considered to complement the former.¹¹ Aristotle relates that Hippodamos “invented the division of *poleis* precincts,” a statement that could refer to the physical arrangement of the city, but also to the organisation of citizens and civic functioning within the polis.¹² Hippodamos has been associated with the urban plans at Miletus, Piraeus, Thurii, and Rhodes, although the Piraeus is the only site for which his attribution has widespread acceptance.¹³ The central area of the Piraeus was laid out in a rectangular grid creating parcels of land measuring c. 250 by 275 m (see Figure 2.1). These parcels were further subdivided by smaller streets to form clusters of houses. This arrangement differentiates primary and secondary streets of the city: the wide primary streets define each

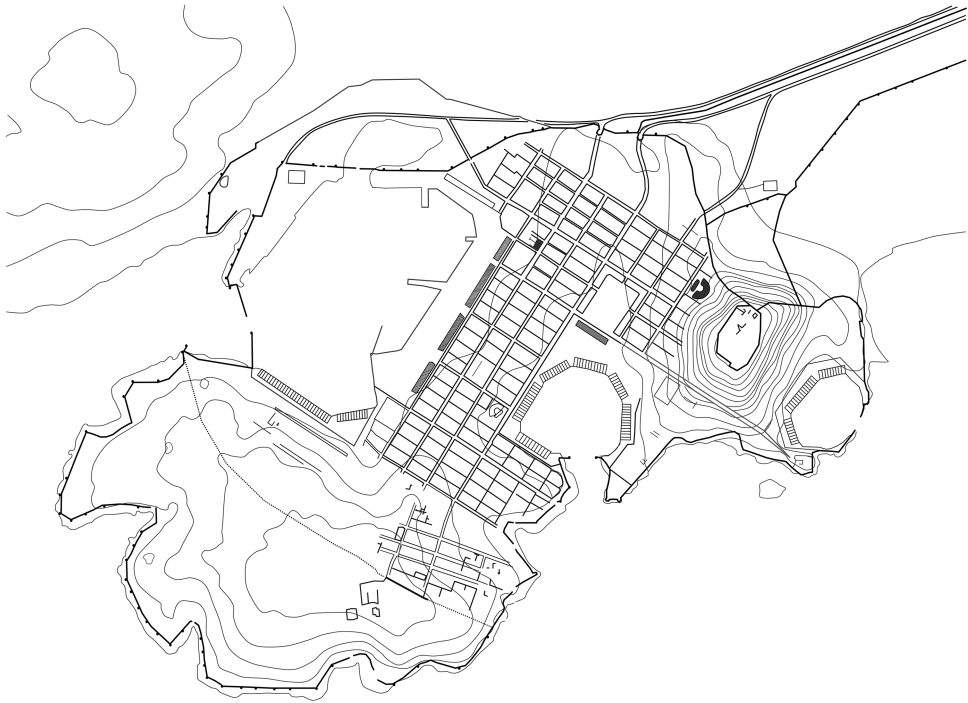


Figure 2.1 Urban grid at Piraeus

Source: Papachatzis 1974, 100–1.

parcel, which is, in turn, articulated by secondary streets running parallel and perpendicular to the main streets.¹⁴ Divisions of space at the Piraeus are further attested by inscribed boundary stones that were likely used to define and designate specific zones of the city prior to the laying out of the grid.¹⁵ A similar hierarchical organisation is seen at Thurii: the southern Italian foundation was designed with four principal east-west streets (seven m wide) intersected by three north-south running thoroughfares (13 m wide). The streets intersect to create parcels measuring 354 by 295 m, or 1,200 by 1,000 Attic Feet.¹⁶ Each of the parcels was subdivided into units measuring 34 by 68 m (116 by 232 Attic Feet), proportioned exactly 1:2 length to width. Even if Hippodamos' involvement at Thurii is a tenuous assertion (Diodorus Siculus makes no mention of him), the division of urban space within a hierarchical arrangement of streets may be the most significant contribution to urban planning associated with him. The cities of ancient Sicily, for the most part, were not arranged with rectangular parcels as at Thurii or the Piraeus, although rational city designs did dominate in the late Classical and Hellenistic periods. Among the later foundations, such as Solunto and Tyndaris, greater influence may be seen from early Classical designs, such as at Naxos, than from "Hippodamean" plans at Piraeus or Thurii.¹⁷ The primary division of urban space within Sicilian cities remained the *insula*, a long, narrow city block, rather than the wider, nearly square parcel, even if the *insula* is divided by longitudinal and transversal *ambitus*.

The regular, rigid, orthogonal urban grid was a fundamental aspect of the Greek foundations in Sicily; by the end of the Archaic period, nearly all of the *apoikiai* were designed on orthogonal urban grids with standardised street intervals and house lots.¹⁸ As early as the beginning of the seventh century BC, Syracuse, Naxos, and Megara Hyblaia were arranged with houses built with consistent alignments and at regular intervals. At Megara Hyblaia, the residential area of the city was laid out with equal size plots 12 m by 10 m wide arranged in pairs sharing common passageways c. 0.45 m wide. Houses occupied only a small portion of each lot and were limited to single-room structures, c. 15–25 m², while the remainder of the lot was used as a garden. Throughout the Archaic period the houses grew first by doubling their size and eventually filling the entire lot and even building across the walkway or *ambitus* that originally divided them. The lots delineated the framework of the urban grid by the beginning of the sixth century BC as the borders of the plot transformed into streets articulating the city (see Figure 2.2).¹⁹ Similar alignments at Syracuse and Naxos had a higher density of houses, but retained a uniform and consistent alignment within the

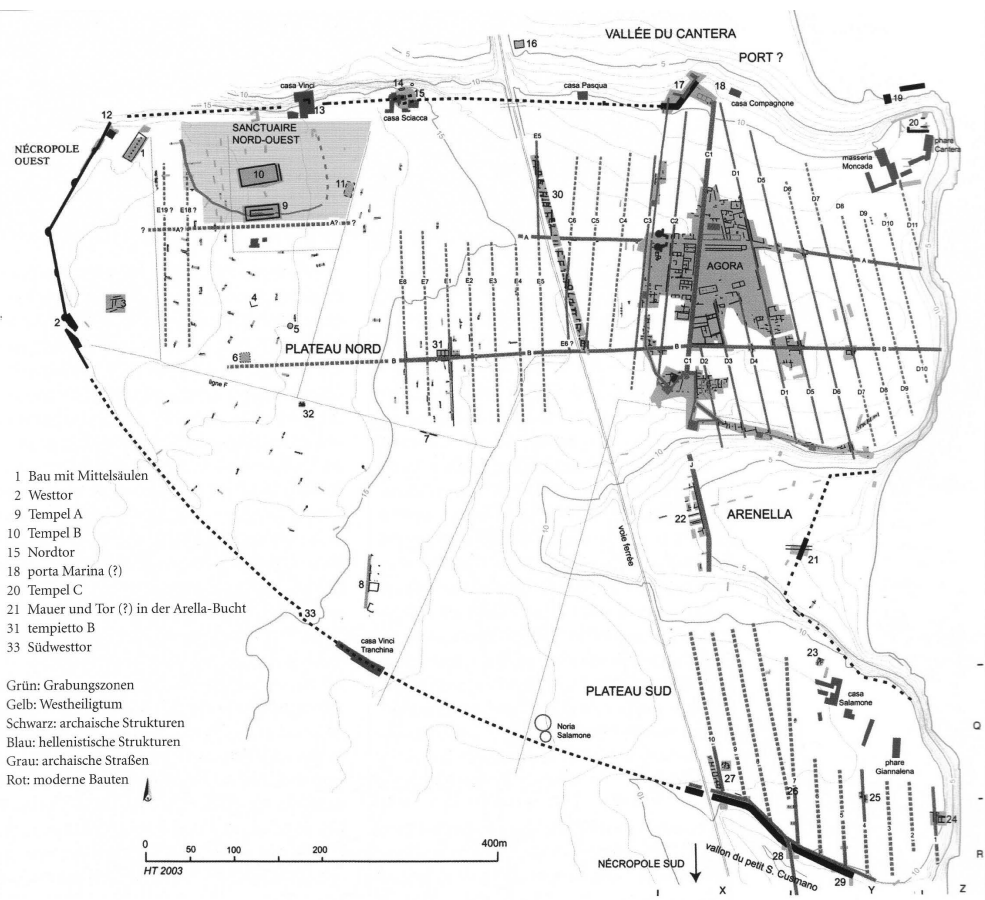


Figure 2.2 Megara Hyblaia: Archaic urban grid

Source: Mertens 2006.

new city.²⁰ In this way, the division of land into equal sized plots that occurred within a generation of the foundation of the *apoikiai* also formed the basis for the regular, orthogonal grid actualised with the development of the *polis*.

The Archaic urban grid in Greek Sicily took the form of a *per strigas* system, which incorporated the principal thoroughfares (*plateiai*) oriented east-west, intersecting narrower north-south streets (*stenopoi*); together they formed the city blocks (*insulae*). Houses were generally arranged in pairs that together span with width of the *insula*; houses either shared a back party wall, or, more frequently, were divided by an *ambitus* running the length of the block. The *per strigas* arrangement allowed for the arrangement of the *plateiai* at substantial intervals to create long, narrow *insulae* that maximised urban density by providing expansive uninterrupted space for housing at the expense of accessibility and articulation within the city. This type of urban plan is found at Selinus, Akragas, Kasmenai, and Himera. Selinus, founded in the middle of the seventh century by Megara Hyblaia, developed an urban grid c. 580–70 BC (see Figure 2.3).²¹ Selinus's Acropolis Hill contained twelve city blocks spanning the

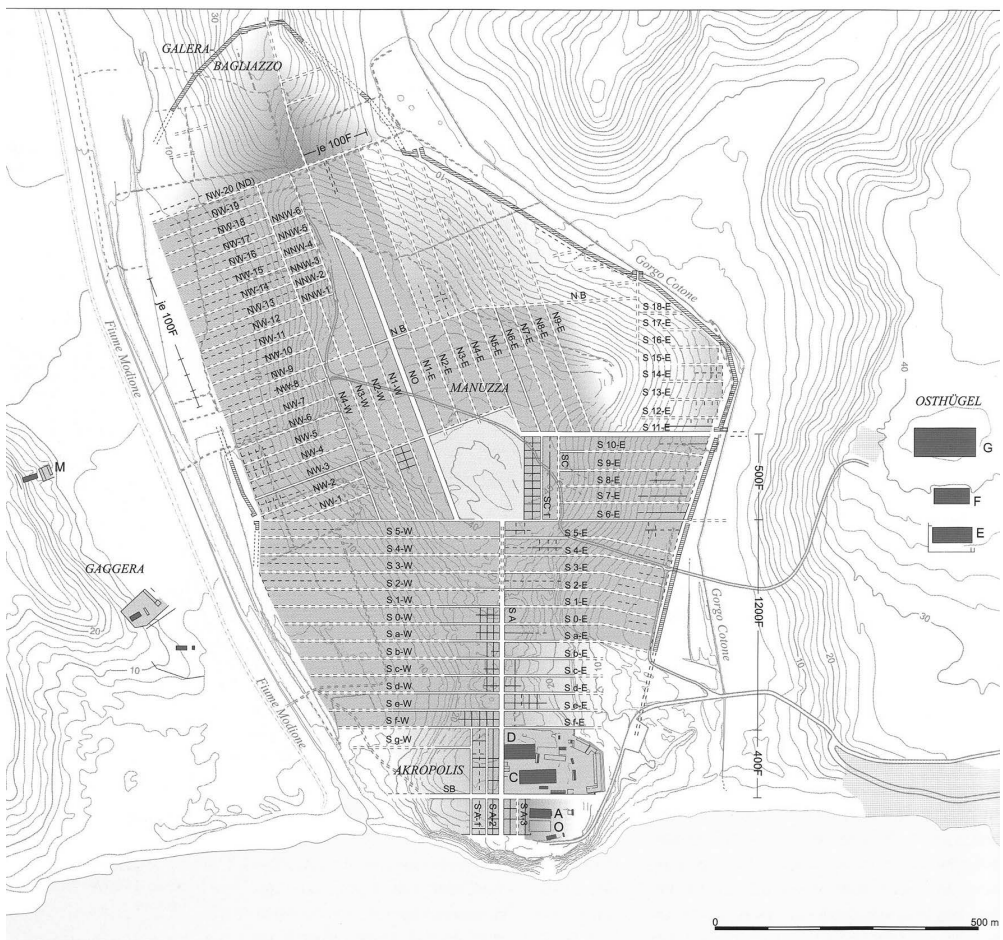


Figure 2.3 Selinus: Archaic urban grid

Source: Mertens 2006.

interval between the acropolis sanctuary and the foot of the Manuzza Hill; streets in this area appear in three different widths corresponding to their importance: 9.0 m and 6.5 m (*plateiai*) and 3.5 m (*stenopoi*). The *stenopoi* are arranged at intervals of 29 m, so that the width of the city block plus the width of the street nears 32.50 m, or 100 Doric Feet (DF).²² *Insula* length varies between 195 and 180 m on the Manuzza Hill, while one single *plateia* articulates the Acropolis Hill with the result that *insulae* run substantially longer.²³ The *stenopoi* were divided into square lots (*oikopeda*) 14.5 m a side.

Akragas, the sub-colony of Gela founded in 580 BC, developed on an orthogonal urban grid: six *plateiai* (7–10 m wide) oriented WSW-ENE are arranged at intervals of 35 m (see Figure 2.4). At least 30 *stenopoi* (5.25 m wide) intersect the *plateiai* in a *per strigas* system with blocks as long as 280 m long. The *insulae* were divided longitudinally and transversally by *ambitus*, creating *oikopeda* with houses as large as 200 m² each. Kasmenai, a sub-colony of Syracuse located high in the Hyblaian Hills, was also built on a rigid urban grid filling the entire area within the fortification wall, an area of c. 60 hectares. *Stenopoi* (c. three m) ran NNW-SSE forming city blocks 25 m wide.²⁴ Thirty-eight *stenopoi* in a *per strigas* system extend uninterrupted across the residential

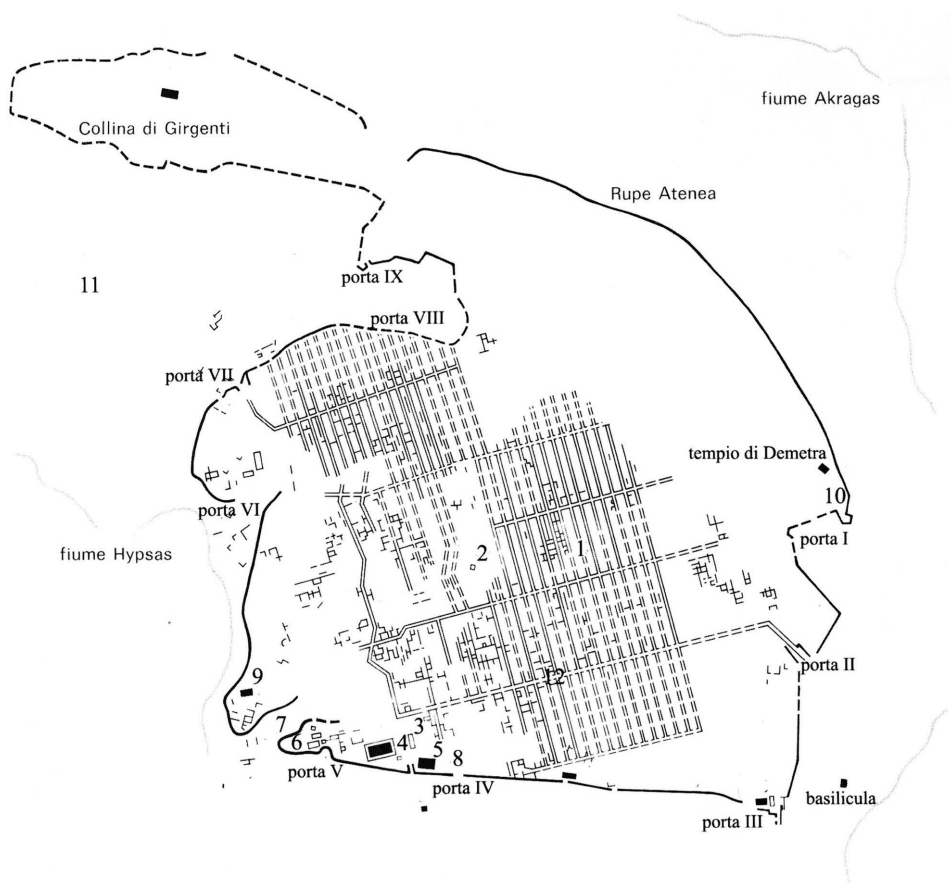


Figure 2.4 Akragas: Archaic urban grid

Source: Mertens 2006.

area; the largest extended for up to 400 m; each city block was divided by transversal *ambitus* that created lots c. 25 m² that were subdivided into four house units.

Himera was built with an urban grid at both the upper city on the plateau and on the plain below it; both sites dated to the second quarter of the sixth century BC (see Figure 2.5). The upper city is arranged on a north-south running *plateia* (6.2 m in width) intersected by at least 18 *stenopoi* (5.50–6 m wide); a sanctuary area is located at the northernmost edge of the city, overlooking the plain and the coastline below. The combined width of the *insulae* and *stenopoi* falls between 32 and 33 m, again reflecting the precise metrology of 100 DF per unit.²⁵ Below, the urban grid on the Bonforrello Plain contained as many as 24 *stenopoi* (6.0–6.3 m wide) oriented NNW-SSE placed at intervals of 41 m, which is the widest city block measurement found on the island. Each *insula* was divided longitudinally and also transversally, with *ambitus* arranged at regular 20 m intervals: the alleyways divide the blocks into squares measuring c. 20 m a side; each lot was composed of one or more houses.²⁶ The lower city was articulated on at least one *plateia* that extended west from the agora, located at the eastern end of the grid. This public area touched the northwest corner of the temenos of the Temple of Victory, built following the defeat of the Carthaginians in 480 BC.²⁷

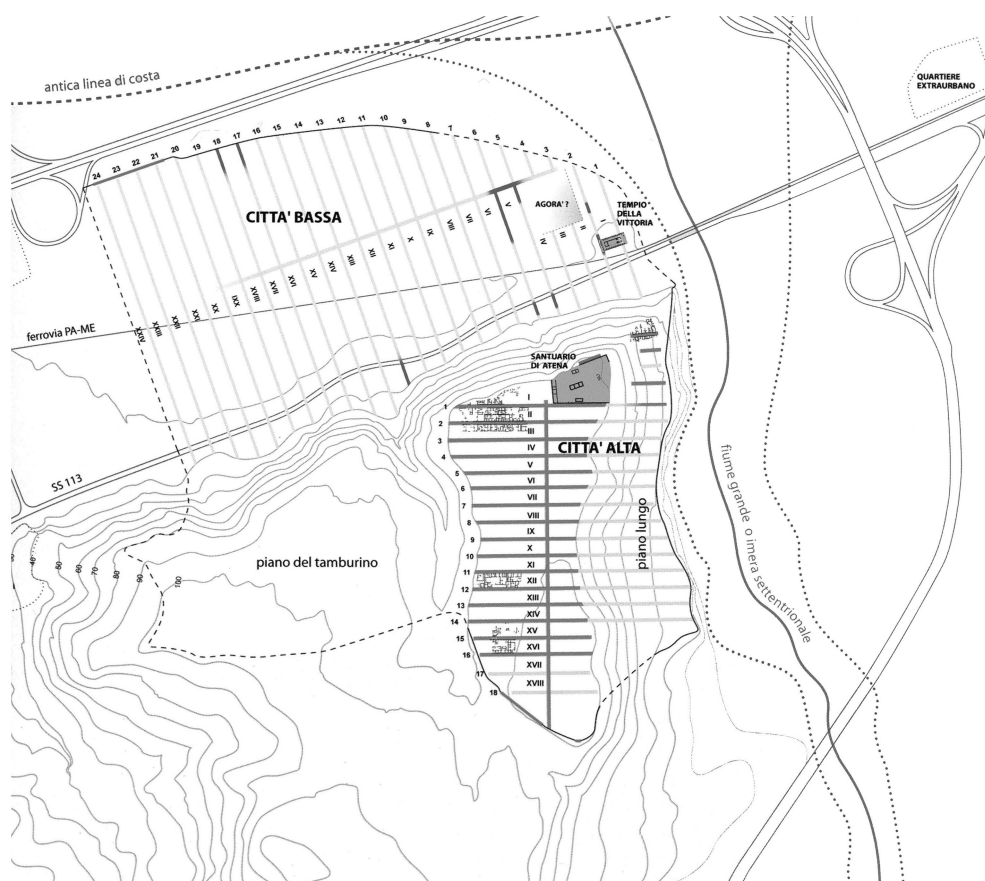


Figure 2.5 Himera: Urban grid of upper and lower city

Source: Vassallo 2009.

The use of a specific metrology, i.e. 100 feet, indicates a high degree of preplanning and the forceful imposition of a grid on the natural terrain. The choice of 100 feet is convenient (32 m splits into two houses c. 15 m wide with an *ambitus* separating them), but it also likely represents a sense of wholeness or completeness implicit in the concept of a Hekatompedon or “100 footer”.²⁸ The use of precise metrology became a guiding principle in urban design in the ensuing centuries: further refinements in metrology become hallmarks in urban planning in Sicily in the Classical period. The *per strigas* system is refined so that *insula* length was shortened and commonly established as a multiple of the width. This development appears for the first time in Sicily at Naxos at the end of the first quarter of the fifth century BC (see Figure 2.6). This urban grid holds a key place in the development of urban space in the Greek world: the asty underwent a complete reconstruction c. 475 BC with the creation of a new built environment including a new network of streets. The most salient aspect of the new grid is that its component parts were designed in proportional relationships to each other. The *stenopoi* were set at intervals of 39.1 m and the *plateiai* were placed 156.1 m apart so that the *insulae* they formed measured 39.1 by 156.1 m, for a relationship of 1:4. The rational relationship is a refinement of the *per strigas* system in which the *insula* width is calibrated, but the *insulae* length extends for a significant distance. The rationality of the plan at Naxos allows for more precise subdivision and the creation of an *oikopedon* within the new foundation. The city’s central thoroughfare, *Plateia A*, is 9.5 m wide, and two other *plateia* (B and C) are smaller: 6.4 m and 6.3 m, respectively. Similarly, *Stenopos 6* is 6.6 m while the other *stenopoi* measure between 4.90 and 5.19 m. A recent study of the metrology of the urban grid confirms that it was laid



Figure 2.6 Naxos: Classical period urban grid

Source: Lentini 1998.

out on a modular design: the base unit is a DF of 0.325 m. and is used in a modular design with five feet (1.627 m) as the module. The city blocks correspond to 24 by 96 modules or 120 by 480 feet, *Plateia A* is six modules (30 feet), *Plateia B*, *Plateia C*, and *Stenopos 6* are all four modules, and the regular *stenopoi* are three modules.²⁹

Further evidence for modular design at Naxos comes in the form of an unusual urban feature: stone bases located at the intersections of the urban streets. Located at the southeast corner at the crossings of the *stenopoi* and *plateiai*, 12 rectangular bases (1.4 by 1.25 m or 4 by 4.5 DF) have been identified archaeologically; most are preserved to foundation level but a few examples survive to a height up to .80 m (see Figure 2.7).³⁰ The bases are built in local basalt stone, the same used for roads in the city. Two examples (B5 and A11) demonstrate recesses on the upper surface, perhaps mortises supporting a metal or wooden element above.³¹ The bases have long been noted as an unusual feature of the urban grid and their function has been the subject of speculation.³² They could have served as altars, as indicators of specific streets³³ or used for civic festivals; undoubtedly they add an element of monumentality to each intersection. The bases may also have served a function of *horoi*, in a manner similar to the Piraeus.³⁴ The recent metrological study revealed that the north-south distance between the bases is 100 modules (a modular Hekatompedon?) and the east-west distance is 27 modules.³⁵ The precise placement of the bases, consistently located in the southeast corner of each intersection, indicates that they are an important element and integral to the design of the city. The bases may have been the first built elements of the urban grid and served as preliminary indicators of subsequent elements. The initial survey of the site may have given the placement of the bases, which were then used to provide the orientation and location of the city blocks themselves, essentially creating landmarks that facilitated the orientation and dimensioning of the city blocks.³⁶ Their size and solid construction testify to their importance and the significance of the act of dividing territory, which was a central act in the formation of the urban environment.

In this way, they represent an initial phase of construction and provide insights into the process of building in the urban grid. The unique historical circumstances surrounding the creation of the Classical period urban grid provide insights into the place-making process. Naxos was destroyed by Hippokrates of Gela in 492 BC, a devastation that is attested archaeologically with the end of use of the Archaic grid and by the cessation of coinage in the early fifth century BC. Hieron, the tyrant at Syracuse, rebuilt the city after removing the populations of Naxos and Katane and relocated them at Leontini. New settlers were brought into the two cities: 5,000 settlers from the Peloponnese and an equal number from Syracuse were settled in, “not only the territory of Katane but also much neighbouring land which he added to it; he portioned it out in allotments, up to the full sum of ten thousand settlers.”³⁷ Hieron re-founded the city with a new urban grid that shared little with the previous: the main axes were rotated and the trodden level for the entire city was raised. The new plan, therefore, did not only disregard all earlier construction, it also was built upon an artificial surface that deliberately differed from the prior phase of use. The new urban grid is further distanced from its predecessor in its metrology. The switch from the Ionic to the Doric Foot has been interpreted as an indication of Syracusan control of the site and reconstruction under Hieron I.³⁸ The city was nearly the equivalent of a new



Figure 2.7 Naxos: Base at intersection of Classical period urban grid

Source: P. Pelagatti 1973 excavations.

foundation (much like Katane's re-foundation with the name Aitna) and the motive for its re-foundation was to create a new residence for 5,000 mercenaries settled there. The *insulae* divide into house plots. Houses were divided within the *insulae* by a longitudinal *ambitus* (0.5 m wide) and consisted of three to four rooms arranged around a courtyard; on average the houses covered 220 m² apiece. This city block was divided longitudinally by an *ambitus* (1.5 m) and also by transverse *ambitus* (0.4–0.9 m), to create square house lots (*oikopeda*) measuring up to 18.4 m² apiece. Within the area investigated, the lots contained between one and four houses; a common house plan measures 9.2 by 5.5 m (c. 50 m²) with house lots of 18.4 m² (56 feet per side). Within the blocks, houses (on average 220 m² apiece) were divided by a longitudinal *ambitus* (0.5 m wide) and made up of three to four rooms around a courtyard. A similar rationality is found in the early Classical urban grid at Kamarina on the south coast of Sicily: the central E – W *plateiai* are 10.7 m wide, while the *stenopoi*, set at 35-m intervals, are 5.4 m wide or one-half the width of the larger streets. The city blocks are arranged in a rational relationship of 35 by 136.5 m (almost 1:4).

Similar bases within the urban grid have been noted at two other Sicilian cities. At Himera, rectangular bases in calcarenite stone covered with plaster were uncovered at the intersection of the *Plateia* with *Stenopoi* 5 and 6. At Himera, the intersection of the *Plateia* and *Stenopos* 5 likely marks the northwest corner of the agora, while *Stenopos* 6 likely contained houses. While the function as *horoi* adjacent to an agora must be considered, the consistent position of the bases raises the question whether they had

a function related to the establishment of the grid. Again, the bases may have been used as landmarks for the division of the city, in this case including the establishment of the agora that interrupted the pattern of a residential area. The second similar use is at Morgantina-Serra Orlando (see Figure 2.8). The Classical period settlement was founded in the third quarter of the fifth century with an expansive urban grid. The city was articulated on a central *plateia* with *insulae* measuring 38.64 by 106.26 m (330 by 120 feet, or proportionally 1:2.75). The city blocks are divided into lots 17.71 m wide (55 feet) and 18.84 m deep (58.5 feet), for a unit consisting of six lots across by two deep, divided by a longitudinal *ambitus*.³⁹ Rectangular bases have been located along the east side of the *plateia* at the intersections with *Stenopoi* 4, 5, and 10 and at the corner of the agora. M. Bell identifies the constructions as altars dedicated to deities for whom the streets were named.⁴⁰ While a religious use, and a function to demarcate public from private space cannot be excluded, the bases may have had a similar instrumental role in the creation of the urban grid. Their appearance at Morgantina is significant for one more reason: the urban grid at Morgantina is the largest and most refined in inland Sicily. The foundation of Morgantina-Serra Orlando may be a joint undertaking of Sikels and Syracuse or possibly attributed to interventions by Kamarina.⁴¹ Given their similarities, perhaps the know-how of building the urban grid flowed from Naxos, which had nearly identical *insula* widths, so that the principles of Greek urban planning are employed in the hinterland of Sicily at a site of indigenous origin.⁴²

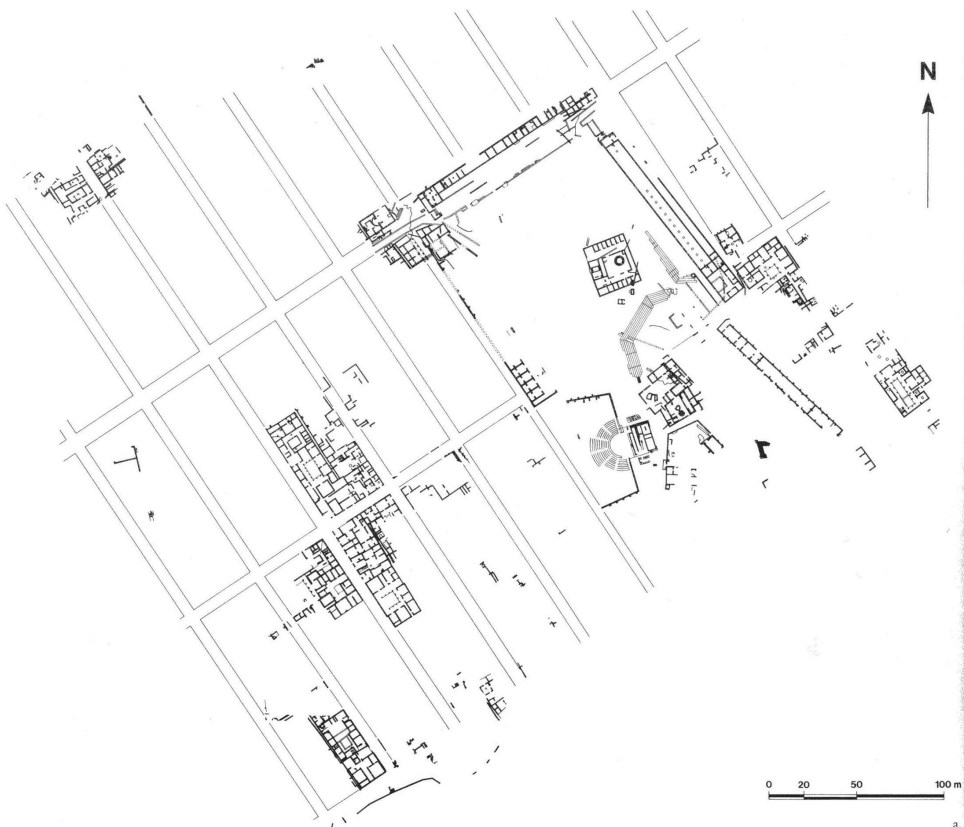


Figure 2.8 Morgantina-Serra Orlando

Source: Di Vita, 1996.

There is another example of a fully formed urban grid in inland Sicily, this one from the Archaic period. Monte Saraceno di Ravenusa, located above the west bank of the Salso River 20 km north of Licata, developed a regular, rigid urban grid in the sixth century BC. The indigenous site received Greek materials and broadly felt Geloan influence in the second half of the seventh through the early sixth century BC.⁴³ The site was destroyed in the third quarter of the century and reconstructed with a new urban grid (see Figure 2.9). The new built environment included a fortification wall, the definition of a sacred area on the acropolis, and an urban grid on the lower terrace. The orthogonal urban grid had regular elements: two *plateiai* measure 5.5 m wide and *stenopoi* range from between 3.8 and 4.0 m in width. These streets intersected to create city blocks 23 by 55.5 m (1:2.4), that are substantially more compact than the arrangement

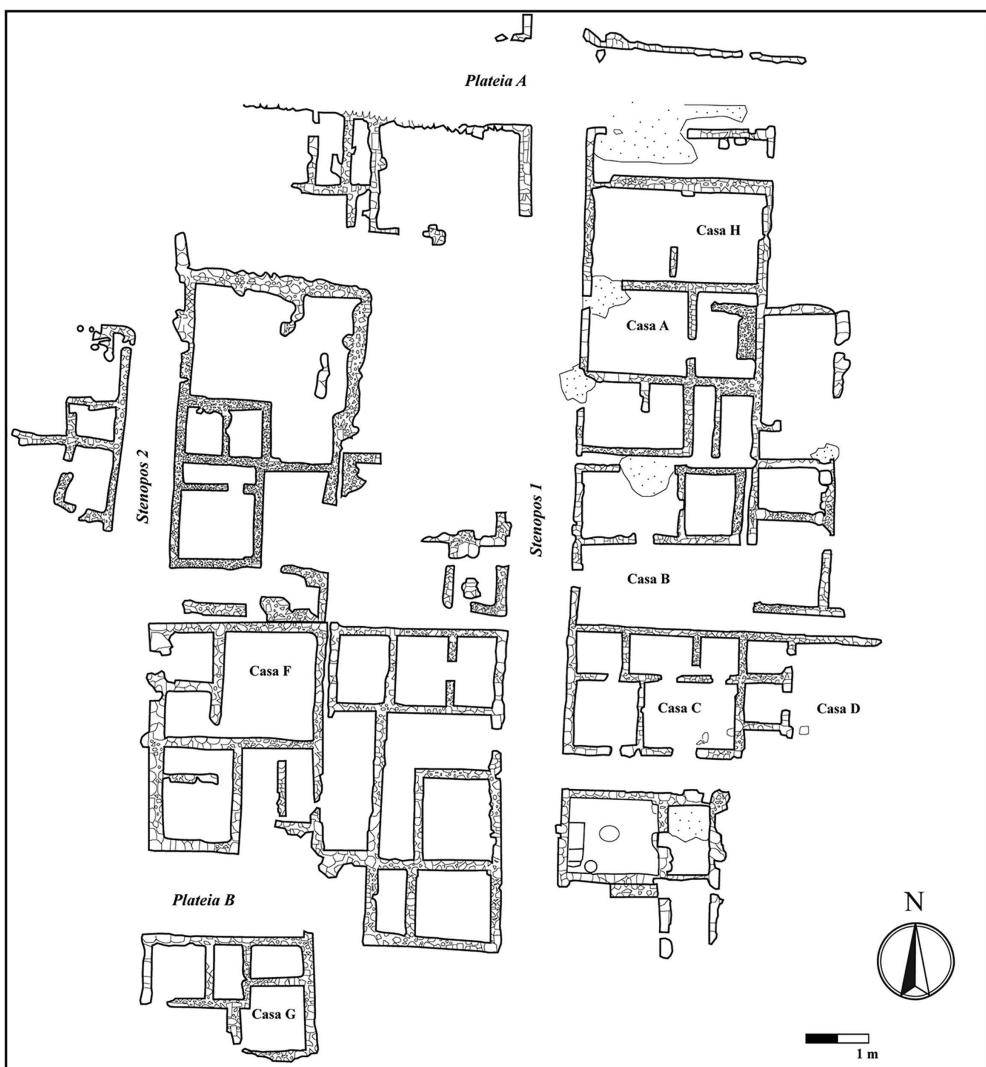


Figure 2.9 Monte Saraceno di Ravenusa: Archaic plan terrace

Source: M.A. Barbato.

at Archaic Greek cities of Sicily. As well, the city block interval of 23 m is considerably smaller than that at Himera, Akragas, and Naxos.⁴⁴ The *insulae* are divided longitudinally by a solid party wall or by an *ambitus*; *transversal ambitus* also divided the city blocks into rectangular lots varying in size between 170 and 260 m², assumed to contain two houses apiece.⁴⁵ The new urban form, with salient developments such as provisions for the diffusion of rainwater, resembles that of Greek cities, Akragas in particular.⁴⁶ The construction of a new urban grid following after the destruction of the preceding phase parallels sequences of construction at Naxos and Morgantina, and, similar to the interventions by Hieron at Naxos, may indicate new political control of the site. In this case, it demarcates that Monte Saraceno di Ravanusa was brought under Greek control. The expansion of Akragas' political sphere of influence extended not only a further Greek presence to the Sicilian hinterland, witnessed by the re-foundation of the site, but it also introduced direct Greek political control and formalised the site's role as a satellite settlement within the *chora*. The site, like many *komai* and *phrouria* in the hinterland of Greek poleis, became home to mercenaries in the Classical period.⁴⁷ The state of urbanisation at Monte Saraceno di Ravanusa is the most articulated in inland Sicily. Elsewhere, regular building and organisation of space does occur, although without a rigid, regular urban grid that employed precise metrology.

Located along the route from Katane to Morgantina on a ridge south of the Gornalunga River, Montagna di Ramacca was home to an indigenous settlement that flourished in the early Archaic period.⁴⁸ Inhabited from the late Iron Age, the site demonstrates Greek acculturation across the Archaic period, attested by domestic assemblages and tomb finds. House RM, dated to the late seventh century BC, consists of two rooms, one with a hearth, plaster floor, and low bench along the north wall; the other was designated for food storage (see Figure 2.10). The bipartite design and the differentiation of space in the house are innovations that have been attributed to Greek contact.⁴⁹ In the second half of the sixth century BC, multi-room houses, often

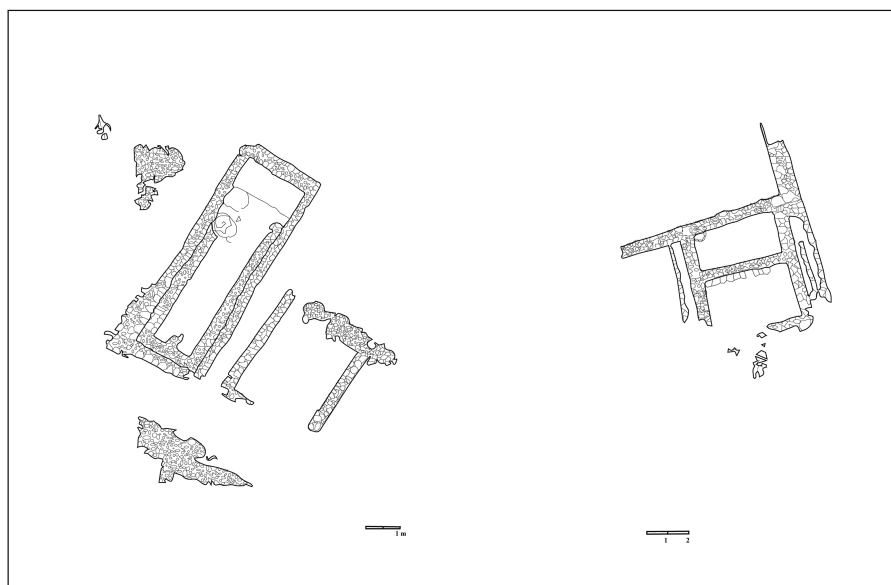


Figure 2.10 Montagna di Ramacca

Source: M.A. Barbato.

articulated around a paved courtyard, appeared at numerous inland sites including Castiglione, Sabucina, and Vassallaggi. The articulation of the house and the specialization of domestic spaces are design aspects adopted from Greek domestic architecture. A temple model from Sabucina, dated to the last quarter of the sixth century BC, presents a prostyle temple with horseman and horse acroteria and pedimental sculpture depicting a gorgon mask and perhaps a silenus.⁵⁰ From the same site, a Doric column capital with an octagonal, rather than circular, echinus demonstrates a variation of familiar Greek architectural elements.

Across the seventh and sixth centuries BC, urbanisation at indigenous sites develops with rectangular houses and straight streets, such as at Castiglione and Hill 3 at Vassallaggi (San Cataldo); houses at the latter were arranged around a central street, and generally align with parallel walls, although orthogonal *stenopoi* are not part of the plan (see Figure 2.11). A similar arrangement is seen at Morgantina-Cittadella,



Figure 2.11 Vassallaggi Hill 3

Source: M.A. Barbato.

which in the sixth century BC saw an urban arrangement that included a *sacellum*.⁵¹ A lesser degree of planning is found at Castiglione located on a long ridge overlooking the Plain of Kamarina. Individual houses consist of an agglomeration of rooms, often joined at their short ends; open, common space, in which silos were identified, was left adjacent to the houses. The site has been noted for its organic development and the lack of a rigid urban grid.⁵² Major and minor streets did not consistently intersect at right angles, and no regular intervals governing the street plan have been discerned.

In summary, early Archaic period sites such as Castiglione and Vassallaggi grew into nucleated settlements with nascent urban traits that include rectangular buildings and straight streets, but the settlements lacked a centralised, rigid, or comprehensive design. These urban plans demonstrate a linear development from Iron Age traditions and do not match the orthogonal city plans developing at neighbouring Greek sites. Plans that prioritised an urban network of streets with a regular design appeared in a moment that came slightly later, following impetus from Greek foundations. Regular grid plans appear at Hellenised indigenous sites including Monte Saraceno di Ravanusa and Morgantina – Serra Orlando in the interior. The adoption of an urban grid at these sites was most likely the result of direct impetus from Greek foundations, following the definition of the *chora* of Akragas at Monte Saraceno and later political involvement at Morgantina.

Notes

* I would like to thank Samantha Martin-McAuliffe and Daniel Millette for the opportunity to participate in this volume. All mistakes are my own.

1 On the division of territory as essential steps in the process of site formation: Malkin 1987, 138; Carter, Thompson and Trelogan, 2004, 136.

2 Vassallo 2012, 206.

3 de Polignac 1995, 21–5, 33–41.

4 Greco 1996, 239; Di Vita 1996, 279; Greco 2002, 112.

5 Frederiksen 2011, 74–80.

6 Carter 2006, 91–132, esp. 119–21.

7 Malkin 1987, 135; On the cult of the *oikist*: Dougherty 1993, 24–7; Malkin 1987, 205–15. An opposing view would reduce the role of *oikist* in an expedition that more closely resembles a private venture in which initial urban planning was more collective and not necessarily directed by a singular central authority: Osborne 1998; Shipley 2005, 348; but also Malkin 2002.

8 Od. 6.7–10:

ἐνθεν ἀναστήσας ἄγε Ναυσίθοος θεοειδής,
εἶσεν δὲ Σχερίη, ἐκάς ἀνδρῶν ἀλφειστάων,
ἀμφὶ δὲ τεῖχος ἔλασσε πόλει, καὶ ἐδείματο οἴκους,
καὶ νηοὺς ποίησε θεῶν, καὶ ἐδάσσατ' ἀρούρας. (Loeb Translation)

9 Carter 2006, 195–202.

10 *Pyth.* 5.89ff. The *oikist* was also awarded an exceptional burial within the agora of the city.

11 As an architect: Strabo (14.2.9), Hesychius (Lexicon), and perhaps Aristotle (*Politics* 1267b) consider him a theorist, Cahill 2002, 3–5.

12 Aristotle, *Politics* 1267b.

- 13 Hill 1932; McCredie 1971. The chronology of the four sites remains in question as well as Hippodamus' lifespan: involvement at all four sites would require a career of approximately 80 years (Miletus: 479, Rhodes 406 BC). Castignoli 1963, Gorman 1995, Gill 2006.
- 14 Hoepfner and Schwandtner 1994, 22–50; Garland 1987, 144–5; Pakkanen 2013, 52, n. 10.
- 15 Gill 2006, 5–6; Garland 1987, 225–6.
- 16 Diodorus Siculus provides an account of the foundation of Thurii at Diod. 12.10.7. Summary of urban planning at Thurii et al. 1983, 267–9. Similar design principles may have been employed at other cities of Southern Italy, namely Tarantum and Herakleia: Mertens 2006, 355–70.
- 17 Similarly, Cahill points out that the urban plan at Olynthus, which shares proportional relationships with Tyndaris and Morgantina, does not demonstrate the salient urban features attributed to Hippodamos, Cahill 2002, 5.
- 18 Useful summaries of urbanism in Sicily: Di Vita 1996; Greco and Torelli 1983; Belvedere 1990; Menéndez Varela 2003, with preceding bibliography.
- 19 Gras et al. 2004; Mertens 2006, 63–9.
- 20 Lentini 2009, 19–26; Mertens 2006, 74–5.
- 21 Mertens 2006, 174–5; Østby 1995, 85–7.
- 22 Using a Doric Foot measuring .325 m.
- 23 Rallo 1984, 90.
- 24 Di Vita 1961.
- 25 Mertens 2006, 191; Graham 1972, 300.
- 26 Allegro and Vassallo 1992, 140.
- 27 Vassallo 2009; Vassallo 2012, 202.
- 28 The use of 100 feet (c. 29–32 m) extends back to at least the early Archaic period with the so-called Hekatompedon at the Sanctuary of Hera at Samos (ca. 32.86 m). Other hekatompeda have been identified at Ano Mazaraki, Eretria (the Archaic temples of Apollo Daphnephoros), Mitropolis in Thessaly, Poseidonia/Paestum (Athena Temple), and in the Olympieion at Athens, which is 100 feet wide (Hellmann 2006, 69–70). Despite this list, it is important to recall that the name and attribution is modern. The term is used by Homer to convey the outstanding magnitude of Patrokles's funeral pyre (*Il.* 23.164). The earliest epigraphical attestation of the term “Hekatompedon” comes from an Archaic inscription from the Athenian Acropolis, the Hekatompedon Inscription (IG I³ 4), which describes a locus on the Athenian Acropolis with this name; the reference is generally considered to be a temple, but there is no certainty. The “Hekatompedon” named in the inscription may have been a precinct that held “oikemata” or could even be negative space. Later in the Classical period, the term is used first as a name for the Parthenon itself and eventually it comes to refer to the cella (29.8 m long) of the temple. The measurement of 100 feet may have been endowed with a sacredness tied to a sense of completeness. Expansive and complete, it may be a concept that began a type of modularity in Greek design.
- 29 Pakkanen 2013, 2, 57; Belvedere 1987, 8–10; Pelagatti 1998, 51–2 theorised the modular design.
- 30 Bases are identified at *Plateia* C: C01; *Plateia* B: B1, B2, B4, B5, B6, B7; and *Plateia* A: A3, A4, A5, A6, and A11. Pelagatti 1998, 53, n. 44.
- 31 Pelagatti 1998, 53. Martin (1974, n. 52, p. 316) hypothesised a stele above, “une super-structure de qualité.”
- 32 Pelagatti 1976–77, 537–40; Pelagatti 1977, 44, n. 11; Pelagatti 1998, 53; Martin 1974, 316, n. 52; Giuliano 1984, 18; Lentini 1998, 74; Lentini 2009, 13.
- 33 Street names at Thurii: Greco 1999.
- 34 See above.
- 35 The distance between *Stenopoi* 5 and 6 is widened to 27.5 modules to accommodate the wider *Stenopos* 6. Pakkanen 2013, 57.
- 36 Giuliano 1984, 18; Pelagatti 1998, 53.
- 37 Diod. Sic. 11.49.1–2 (Loeb Translation, with modifications).
- 38 Lentini 1998, 72; Mertens 2006, 343.

- 39 The metrology at Morgantina-Serra Orlando is based on a foot of 0.322 m. Walsh 2011–12, 126–7; Bell 2008.
- 40 Bell 2012, 113.
- 41 Walsh 2011–12, 128–30; Bell 2006, 255–7.
- 42 Bell 1988, 316, 319–21.
- 43 Caccamo Caltabiano et al. 2003; Adornato 2011, 73–4; Albanese Procelli 2005, 125.
- 44 The excavators note that the insula interval is 28% smaller than that at Himera Alta (32 m), 44% smaller than Himera Bassa (41 m), 34% and 41% smaller than Akragas (35 m) and Naxos (39 m), respectively. Calderone 1996, 57.
- 45 Siracusano 1996, 57, 63–7.
- 46 Adornato 2011, 74; Adornato 2012, 496; Albanese Procelli 2003, 160.
- 47 Monte Saraceno has long been identified with Kakyron: Adamesteanu 1956, 138–40. Mercenaries employed by the Deinomenids took flight following the fall of the tyrants and sought refuge at Omphake, Kakyron, and Krastos (Pap. Oxyrh. IV, 665, 1–7). See also de Waele 1971, 45–7; Caccamo Caltabiano 1996, 183–4.
- 48 Procelli 1988–89; Procelli 1989. The site has been identified as Ergetion (Polyaen. V 6, Steph. Byz.).
- 49 Albanese Procelli 2005, 126.
- 50 Panvini 2006, 75.
- 51 Antonaccio 1997; Romeo 1989, 14–16.
- 52 Di Stefano 1995, 57–60.

Bibliography

- Adamesteanu, D. 1956. “Monte Saraceno ed il problema della penetrazione rodio-cretese nella Sicilia meridionale.” *ArchCl* 8: 121–46.
- Adornato, G. 2011. *Akragas Arcaica: Modelli culturali e linguaggi artistici di una città greca d'occidente*. Milan: Edizioni Universitarie di lettere economia diritto.
- Adornato, G. 2012. “Phalaris: Literary Myth or Historical Reality? Reassessing Archaic Akragas.” *AJA* 116: 483–506.
- Albanese Procelli, R.M. 2003. *Sicani, Siculi, Elimi: forme di identità, modi di contatto e processi di trasformazione*. Milano: Longanesi.
- Albanese Procelli, R.M. 2005. “La ricezione dei modelli dell’architettura greca nel mondo indigeno: Le strutture abitative.” In P. Minà (ed.), *Urbanistica e architettura nella Sicilia greca: mostra Agrigento 14 Novembre 2004–31 Ottobre 2005*, 125–7. Palermo: Regione Siciliana.
- Allegro, N., and S. Vassallo. 1992. “Himera – Nuove ricerche nella città bassa (1989–1992).” *Kokalos* 38: 79–150.
- Antonaccio, C. 1997. “Urbanism at Archaic Morgantina.” *Acta Hyperborea* 7: 167–93.
- Bell, M. 1988. “Excavation at Morgantina, 1980–1985: Preliminary Report XII.” *AJA* 92: 313–42.
- Bell, M. 2006. “Rapporti Urbanistici fra Camarina e Morgantina.” In P. Pelagatti, G. Di Stefano, and L. de Lachenal (eds.), *Camarina 2600 anni dopo: nuovi studi sulla città e sul territorio. Atti del Convegno Internazionale, Ragusa, 7–9 Aprile 2003*, 253–8. Rome: Centro studi Feliciano Rossitto.
- Bell, M. 2008. “Hiera Oikopeda.” In C.A. Di Stefano (ed.), *Demetra L’divinità, I santuari, Il Culto, La Leggenda: Atti del I Congresso Internazionale Enna, 1–4 Luglio 2004*, 155–9. Pisa and Roma: Fabrizio Serra Editore.
- Bell, M. 2012. “Spazio e istituzioni nell’*agora* greca di Morgantina.” In C. Ampolo (ed.), *Agora greca e agorai di Sicilia*, Scuola Normale Superiore Pisa, 111–18. Pisa: Edizioni Della Norma.
- Belvedere, O. 1987. “Himera, Naxos, e Camarina: Tre casi di urbanistica coloniale.” *Xenia* 14: 5–20.

- Belvedere, O. 1990. "L'urbanistica." In N. Bonacasa (ed.), *Lo stile severo in Sicilia. Dall'apogeo della tirranide alla prima democrazia*. Museo Archeologico Regionale Palermo, 10 febbraio-30 settembre 1990, 63-74. Palermo: Novecento.
- Caccamo Caltabiano, M. 1996. "I rinvenimenti monetali: Monte Saraceno sede di xenoi?" In A. Calderone, M. Caccamo Caltabiano, and E. De Miro (eds.), *Monte Saraceno di Ravenusa: Un ventennio di ricerche e studi*, 183-93. Messina: Sicania.
- Caccamo Caltabiano, M., et al. 2003. *Il Centro antico di Monte Saraceno di Ravenusa: Dall'archeologica alla storia*. Fontana: Campobello di Licata.
- Cahill, N. 2002. *Household and City Organisation at Olynthus*. New Haven, CT: Yale University Press.
- Calderone, A. 1996. "L'abitato." In A. Calderone, M. Caccamo Caltabiano, and E. De Miro (eds.), *Monte Saraceno di Ravenusa: Un ventennio di ricerche e studi*, 41-88. Messina: Sicania.
- Carter, J. 2006. *Discovering the Greek Countryside at Metaponto*. Ann Arbor, MI: University of Michigan Press.
- Carter, J., S. Thompson, and J. Trelogan. 2004. "Dividing the Chora." In F. Kolb (ed.), *Chora und Polis*, *Schriften des Historischen Kollegs Kolloquien* 54, 127-45. Munich: Oldenbourg Wissenschaftsverlag.
- Castignoli, F. 1963. "Recenti ricerche sull'urbanistica ippodamea." *ArchCl* 15: 180-97.
- De Polignac, F. 1995. *Cults, Territory and the Origins of the Greek City-State* (J. Lloyd, trans.). Chicago: University of Chicago Press.
- de Waele, J.A. 1971. *Acragas Graeca: Die historische topographie des griechischen Akragas auf Sizilien, I, historischer teil*. The Hague: Gravenhague Staatsdrukkerij.
- Di Stefano, G. 1995. *Indigeni e Greci nell'entroterra di Camarina*. Ragusa: Distretto Scolastico 52.
- Di Vita, A. 1961. "Un contributo all'urbanistica greca di Sicilia: Casmene." In *Atti del settimo congresso internazionale di archeologia classica*, Vol. II, 69-77. Rome.
- Di Vita, A. 1996. "Urbanistica della Sicilia greca." In G.P. Carratelli (ed.), *I Greci in Occidente: Catalogo della mostra Venezia, Palazzo Grassi*, 263-310. Milano: Bompiani.
- Dougherty, C. 1993. *The Poetics of Colonization*. Oxford: Oxford University Press.
- Frederiksen, R. 2011. *Greek City Walls of the Archaic Period, 900-480 BC*. Oxford: Oxford University Press.
- Garland, R. 1987. *The Piraeus From the Fifth to the First Century BC*. Ithaca, NY: Cornell University Press.
- Gill, D. 2006. "Hippodamus and the Piraeus." *Historia* 55: 1-15.
- Giuliano, A. 1984. "Urbanistica della città greche." *Xenia* 7: 13-22.
- Gorman, V. 1995. "Aristotle's Hippodamus (Politics 2.1267b22-30)." *Historia* 44: 385-95.
- Graham, J.W. 1972. "Notes on Houses and Housing Districts at Abdera and Himera." *AJA* 76: 295-301.
- Gras, M., H. Tréziny, and H. Broise. 2004. *Mégara Hyblaea 5: la ville archaïque. L'espace urbain d'une cité grecque de Sicile orientale*. Rome: École Française de Rome.
- Greco, E. 1996. "La Città e il Territorio." In G.P. Carratelli (ed.), *I Greci in Occidente: Catalogo della mostra Venezia, Palazzo Grassi*, 233-42. Milano: Bompiani.
- Greco, E. 1999. "Nomi di strade nella città greche." In M. Castoldi (ed.), *Koina: Miscellanea di studi archeologici in onore di Piero Orlandini*, 223-9. Milano: Edizione ET.
- Greco, E. 2002. "Sanctuaries of Magna Graecia and Sicily." In M. Bennett and A. Paul (eds.), *Magna Graecia: Greek Art From South Italy and Sicily*, 98-119. Easthampton: Hudson Hills Press.
- Greco, E., and M. Torelli. 1983. *Storia dell'urbanistica: il mondo greco*. Roma-Bari: Laterza.

- Hellmann, M.C. 2006. *L'Architecture Grecque: Architecture religieuse et funéraire*. Paris: A&J Picard.
- Hill, D.K. 1932. "Some Boundary Stones From the Piraeus." *AJA* 36: 254–9.
- Hoepfner, W., and E.L. Schwandtner. 1994. *Haus und Stadt im klassischen Griechenland*. Munich: Kunstverlag.
- Lentini, M.C. 1990. "Naxos: alcune case dell'isolato C4 (V secolo a.C.)." *Xenia* 20: 5–22.
- Lentini, M.C. 1998. "Le ultime esplorazioni a Naxos (1983–1995)." In M.C. Lentini (ed.), *Naxos a quarant'anni dall'inizio degli scavi, Atti dell'tavola rotonda, Giardini Naxos, 26–7 Ottobre 1995*, 71–100. Palermo: Regione Siciliana.
- Lentini, M.C. 2009. *Naxos di Sicilia: l'abitato coloniale e l'arsenale navale. Scavi 2003–2006*. Messina: Sicania.
- Malkin, I. 1987. *Religion and Colonization in Ancient Greece*. Leiden: Brill.
- Malkin, I. 2002. "Exploring the Concept of 'Foundation': A Visit to Megara Hyblaia." In V.B. Gorman and E.W. Robinson (eds.), *Oikistes: Studies in the Constitutions, Colonies, and Military Power in the Ancient World Offered in Honor of A.J. Graham*, Mnemosyne Supplement 234, 195–225. Leiden: Brill.
- Martin, R. 1974. *L'Urbanisme dans Grèce Antique*, 2nd ed. Paris: Picard.
- McCredie, J.R. 1971. "Hippodamos of Miletos." In D.G. Mitten, J.G. Pedley, and J.E. Scott (eds.), *Studies Presented to G.M.A. Hanfmann*, 95–100. Mainz: Verlag P. von Zabern.
- Menéndez Varela, J.L. 2003. *Consideraciones acerca del origen y la naturaleza de la ciudad planificada en las colonias griegas de Occidente*, BAR International Series 1104. Oxford: Archaeopress.
- Mertens, D. 2006. *Städte und bauten der Westgriechen: Von der kolonisationszeit bis zur krise um 400 vor Christus*. Munich: Hirmer Verlag.
- Osborne, R. 1998. "Early Greek Colonization? The Nature of Greek Settlement in the West." In N. Fisher and H. Van Wees (eds.), *Archaic Greece: New Approaches and New Evidence*, 251–69. London and Swansea: Duckworth and the Classical Press of Wales.
- Østby, E. 1995. "Chronological Problems of Archaic Selinus." *Acta Hyperborea* 6: 83–101.
- Pakkanen, J. 2013. *Classical Greek Architectural Design: A Quantitative Approach*. Helsinki: Papers and Monographs of the Finnish Institute at Athens.
- Panvini, R. (ed.) 2006. *Caltanissetta: il museo archeologico*. Caltanissetta: Museo Archeologico di Caltanissetta.
- Pelagatti, P. 1976–7. "L'attività della Soprintendenza alle Antichità della Sicilia Orientale." *Kokalos* 22–3: 519–50.
- Pelagatti, P. 1977. "Sacelli e nuovi materiali architettonici a Naxos, Monte San Mauro e Camarina." *CronA* 16: 43–65.
- Pelagatti, P. 1998. "Dalle perlustrazioni di Paolo Orsi e Antonio Salinas alle ricerche recenti." In M.C. Lentini (ed.), *Naxos a quarant'anni dall'inizio degli scavi, Atti dell'tavola rotonda, Giardini Naxos, 26–7 Ottobre 1995*, 39–69. Palermo: Regione Siciliana.
- Procelli, E. 1988–9. "Modi e tempi della ellenizzazione calcidese ai margini della piana di Catania." *Kokalos* 34–5: 121–4.
- Procelli, E. 1989. "Aspetti e problemi dell'ellenizzazione calcidese nella Sicilia orientale." *MEFRA* 101: 679–89.
- Rallo, A. 1984. "Nuovi aspetti dell'urbanistica selinuntina." *ASAtene* 62: 81–96.
- Romeo, I. 1989. "Sacelli arcaici senza peristasi nella Sicilia greca." *Xenia* 17: 5–54.
- Rowland, I.D. and Howe, T.N. (eds.). 1999. *Vitruvius – Ten Books on Architecture*. London and New York: Cambridge University Press.
- Shipley, G. 2005. "Little Boxes on the Hillside: Greek Town Planning, Hippodamos, and Polis Ideology." In M.H. Hansen (ed.), *The Imaginary Polis*, Acts of Copenhagen Polis Centre Vol. 7, 335–403. Copenhagen: Royal Danish Academy of Sciences and Letters.

- Siracusano, A. 1996. "L'acropoli." In A. Calderone, M.C. Caltabiano, and E. De Miro (eds.), *Monte Saraceno di Ravenusa: Un ventennio di ricerche e studi*, 7–40. Messina: Sicania.
- Vassallo, S. 2009. "Himera: ricerche sull'urbanistica arcaica della città bassa." In R. Panvini and L. Sole (eds.), *La Sicilia in età arcaica: dalle apoikiai al 480 a.C.*, 197–202. Palermo: Regione Siciliana.
- Vassallo, S. 2012. "Nuovi dati per la localizzazione dell'agora di Himera." In C. Ampolo (ed.), *Agora greca e agorai di Sicilia*, Scuola Normale Superiore Pisa, 201–9. Pisa: Edizioni Della Norma.
- Walsh, J. 2011–12. "Urbanism and Identity at Classical Morgantina." *MAAR* 56/57: 115–36.

3 The urban development of late Hellenistic Delos*

Mantha Zarmakoupi

Introduction

Delos underwent a rapid economic and urban development after 167 BC, when Romans granted the port of Delos ‘duty-free’ status under Athenian dominion and turned it into a commercial base connecting the eastern and western Mediterranean (see Figure 3.1).¹ The island of Delos was home of the sanctuary of Apollo since the

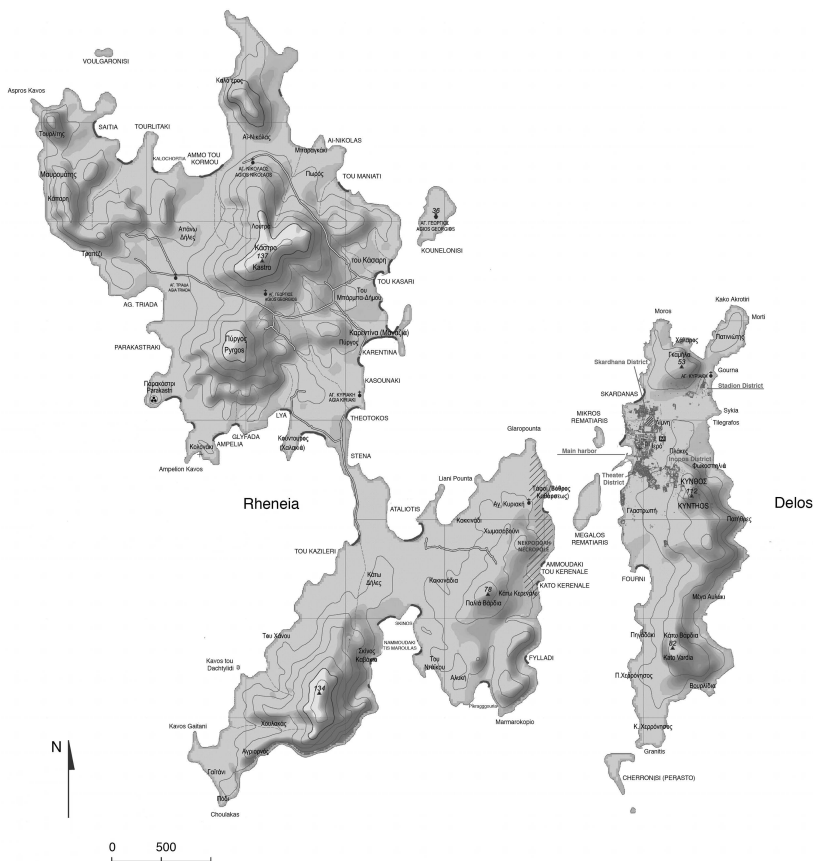


Figure 3.1 Plan of Delos and Rheneia
(© Mantha Zarmakoupi, after Anavasi maps).

Archaic period and, due to its advantageous geographical position in the centre of the Aegean world, commanded a huge cult network that intertwined religious with economic and political activities.² After the grant of the statute of *ateleia* by the Roman senate, Delos became an intermediary in Rome's commercial relations with the Hellenistic East.³ The result of this economic development was an unprecedented demographic growth and, by consequence, an accelerated urbanisation. This is attested by the formation of new neighbourhoods – the Skardhana and the Stadion neighbourhoods – as well as the redevelopment of existing urban and harbour areas of the island through the construction of jetties, docksides, warehouses and markets.⁴

Although numerous archaeological excavations have probed the city of Delos for over a century and recent comprehensive studies have adjusted our understanding of the domestic architecture of the Hellenistic city,⁵ the nature and history of urbanism on Delos remains a surprisingly understudied topic. Only preliminary thoughts have been expressed on the urbanisation of late Hellenistic Delos⁶ together with an estimate of the extent of the city and its population by the use of quantitative methods.⁷ This paper addresses the factors that shaped the city texture on late Hellenistic Delos and outlines the methodology of *UrbaNetworks* – my project on the urban development of late Hellenistic Delos, which was initially funded by the Marie Curie Intra-European Fellowship Scheme (2013–15).⁸

UrbaNetworks and the study of Hellenistic cities

UrbaNetworks focuses on the residential neighbourhoods of late Hellenistic Delos to address the ties between economic change and urban growth. By analysing the urban development of late Hellenistic Delos in relation to economic activities, public administration and private initiatives, the project examines these neighbourhoods as microcosms of the broader developments that the island underwent during the Hellenistic period, when the island became a commercial base connecting the eastern and western Mediterranean.

The field of urban studies in the Hellenistic period is currently dominated by two major trends. On the one hand, research has concentrated on aspects of town planning, characteristic urban architecture and physical infrastructure.⁹ On the other, work has tackled the organisation, economy and physical administration of cities,¹⁰ including the crucial role of benefaction.¹¹ Whereas studies on Roman urbanism have combined these two key approaches by relating urban form with economic developments, public administration and private initiatives,¹² there has been no similar effort for the study of the Hellenistic city. The project aims to analyse the Hellenistic urban fabric not merely as a result of a single planning initiative but of consecutive decisions and actions of both private and public sectors.

More recently, projects on the Hellenistic city aim to address the dynamic character of urban space in Classical antiquity, including the socio-political and environmental factors that inform it.¹³ These studies examine the multivalent character of urban form as well as the socio-political structures and institutions in ancient cities. However, they still focus on the idealised concepts of the Hellenistic and Roman urban environments, such as monumentality, planification and axiality, and do not examine the ways in which activities in the micro-scale of the city shaped its macro-scale. The *UrbaNetworks* project will complement these studies by offering a multi-disciplinary approach to urban growth in the Hellenistic world. In particular, the aim of *UrbaNetworks* is to evaluate the ways in which uncontrolled factors, such as micro- and macro-scale economic

and social developments, fit in our understanding of urbanism in antiquity. Drawing on current developments and debates in the fields of Hellenistic economy,¹⁴ as well as contemporary urban studies, *UrbaNetworks* addresses the relations between the forces that shaped urban growth (economic activities, public administration, private initiatives, cultural and religious diversity) and major components (architecture, landscape, infrastructure) of the urban form on Hellenistic Delos.

A study that relates urban form with economic developments, public administration and private initiatives requires detailed information on the organisation, economy and administration of a city as well as a good state of preservation of its physical remains. The Hellenistic city of Delos is a unique site for such a study: its buildings are in an excellent state of preservation, and it has an outstanding epigraphic record that is complemented by historical sources.¹⁵ *UrbaNetworks* focuses on the main residential neighbourhoods of Delos – the Theatre District, the Inopos District, the Skardhana District and the Stadion District (see Figure 3.1 and Figure 3.2)¹⁶ – to examine the urban development in relation to the economic activities as well as the public and private initiatives. Following the example set by Hoepfner and Schwandner, who focused on houses to study urban planning,¹⁷ I analyse the integration of economic activities in the Delian houses in order to understand the changes that the

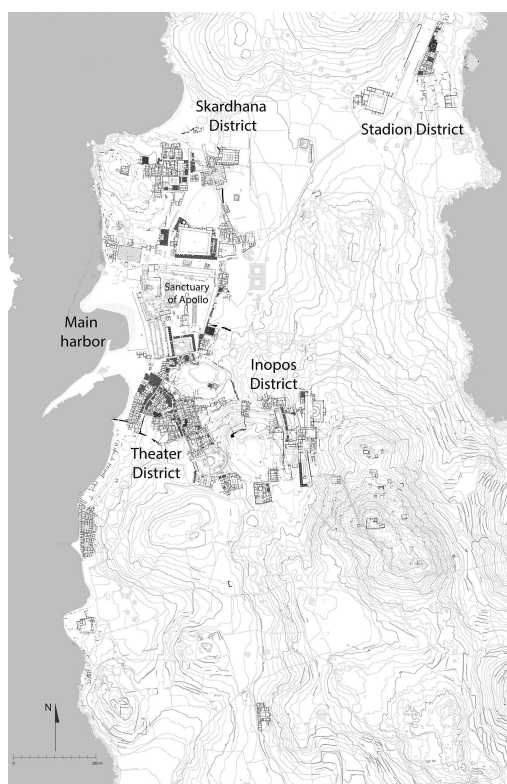


Figure 3.2 Plan of the central area of Delos

(© Mantha Zarmakoupi, after Moretti et al. 2015, plate 5). The gray shaded areas, from lightest to darkest, indicate large commercial buildings shops, workshops and multifunctional spaces; and house-workshops.

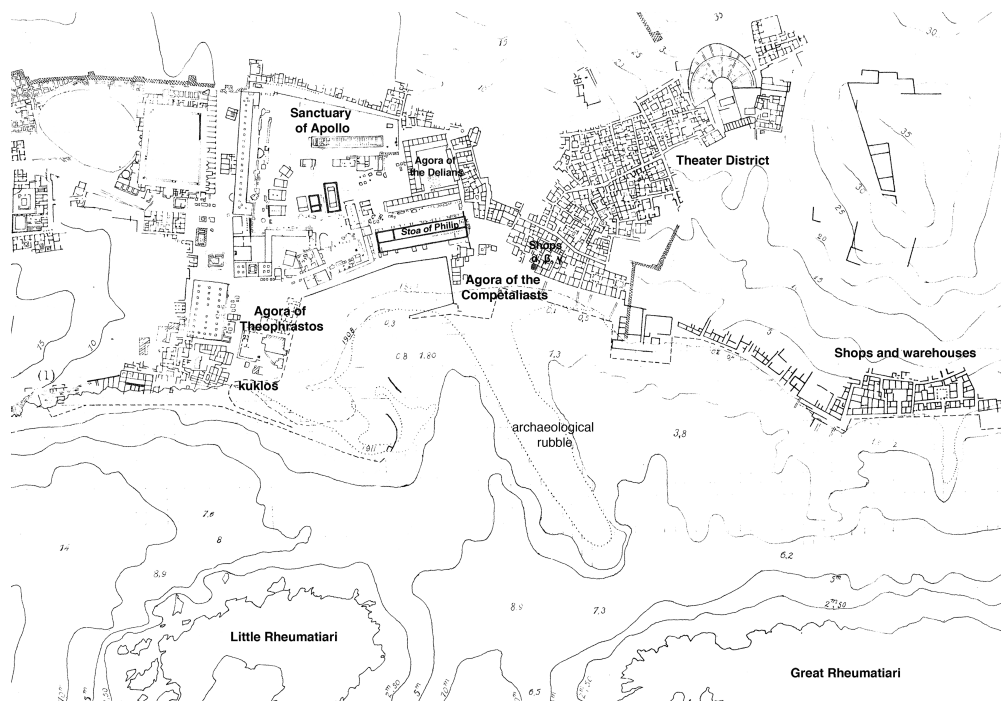
city of Delos underwent in this period. By analysing the transformation of the built environment in relation to manufacturing activities, shopping and storage facilities as well as the construction of public buildings, the project examines the neighbourhoods as microcosms of the broader changes Delos underwent during the late Hellenistic period.

Although *UrbaNetworks* focuses on a specific case study of urban growth, its ultimate goal is to offer an alternative approach to the understanding of urbanism in antiquity. The rapid urbanisation of Delos may be compared with far more accelerated developments of growing commercial centres of Asia and the Gulf Region today. Urban studies today recognise what may be termed as “a disciplinary paralysis” to sufficiently describe, let alone influence, the accelerated urbanisation in developing regions of the world and the rapid redevelopment in existing urban areas. *UrbaNetworks* has the advantage of focusing on an early phenomenon of rapid urbanisation during a period that is well attested in the written and material records. By examining the evolving agents, relationships and consequences of the rapid urbanisation on Delos, this project will identify a model of urban growth that to date has been overlooked in the study of ancient cities that have focused on the idealised concepts of the Hellenistic and Roman urban environments, such as monumentality, planification and axiality. This alternative model of urban growth is indeed the dominant one for contemporary urban studies.¹⁸ Analysing a historical paradigm of such a model can only bring better understanding of the factors that shape the modern city today.

The socio-economic momentum of Delos

From a population of about 1,500 to 2,000 in the period of the independence, Delos gained an estimated amount of roughly 15,000 residents during the period of the second Athenian dominion. It has been suggested that the island reached a population of 20,000 to 30,000 residents at its peak.¹⁹ However there is no firm evidence – inscriptions give evidence for 1,200 citizens and a population of about 6,000 at the beginning of the first century BC. During this period the island is characterised by its cosmopolitan character. The majority of the new residents of the island were from the eastern Mediterranean and the Italian peninsula.²⁰ While some eastern merchants at Delos came from cities as close as western and southern Asia Minor, the majority came from places further abroad, including Antioch, Berytus, Tyre, Sidon, Alexandria and from more exotic points still further east, such as Gadara, Heliopolis, Arabian Nabataea, Gerra on the Persian gulf and in one instance from as far away as Minaei in south Yemen.²¹ The largest ethnic contingent of the island was, however, Roman-Italian.²²

The small settlement of the period of independence, which clustered around the main sanctuary area with some smaller sanctuaries and cultural centres beyond, exploded during the period of the second Athenian dominion. The urbanisation expanded from the area of the old sanctuary centre outwards. The new markets – the Agora of the Hermaistai or the Kompetaliastai (GD 2), the Agora of Theophrastos (GD 49) and the Agora of the Delians (GD 84) – clustered at the borders of the sanctuary.²³ The main harbour facilities expanded to the south of the Agora of the Hermaistai or the Kompetaliastai (see Figure 3.3).²⁴ Houses clustered next to the sanctuary in the old neighbourhood of the Theatre District and new residential neighbourhoods were created



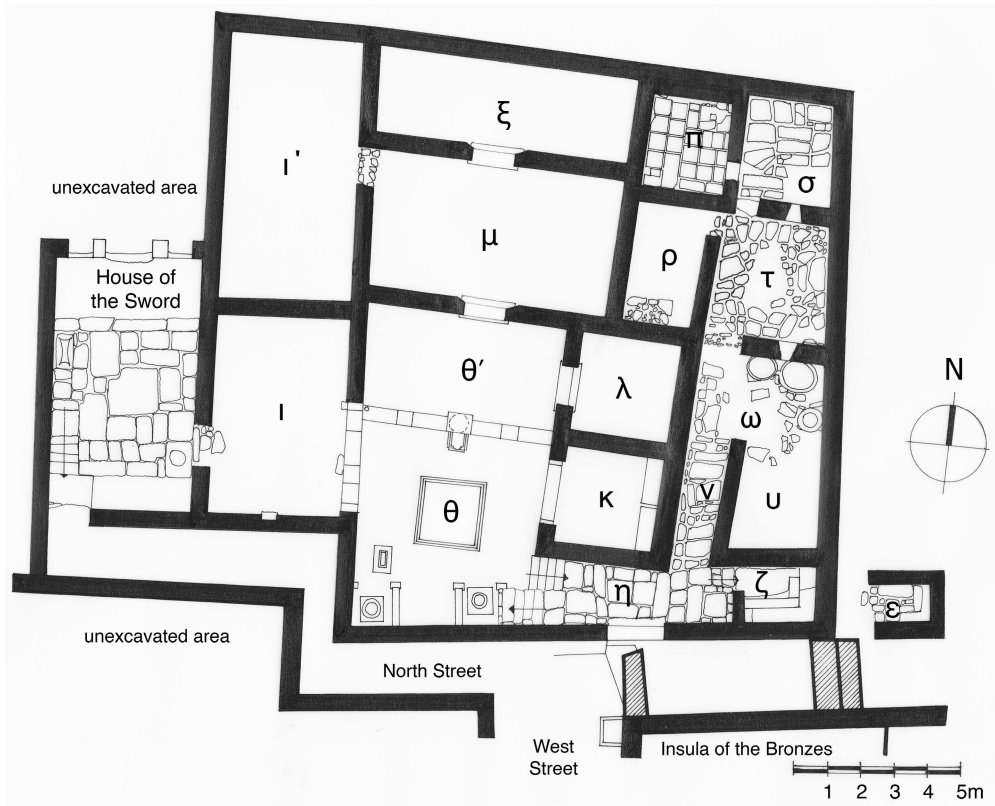


Figure 3.4 House of the Seals in the North District, phase 2, plan

Source: © Mantha Zarmakoupi, after Siebert 2001, plan 4.

being the controversy over the so-called Agora of the Italians and its alleged use as a slave market.³²

Earlier studies on the economy of Delos have focused on the public spaces but I argue that part of the answer can be found in the private sphere. Specifically, the small-scale commercial, manufacturing and storage facilities that were gradually created within the urban fabric of the city complemented the economic activities of the trading centre. The study of the late Hellenistic Delian houses conducted in the context of *UrbaNetworks* shows that a large number of adaptable spaces were gradually created to accommodate shops, workshops, spaces for storage and – quite possibly – rooms to be rented out.³³ These changes show the ways in which owners adapted and transformed the organisation of their houses in order to integrate commercial activities in them rather than creating purpose-built commercial spaces.

As an *entrepôt* – a trading point – Delos did not have large-scale infrastructure for its economic activities. As Duchêne has pointed out, London is the most important oil-trading hub but we never see oil tankers on the Thames.³⁴ Most goods were not unloaded and just the buying and selling took place on land, as was the case in pre-modern Hong Kong.³⁵ In the case of slaves, for example, they were probably brought

ashore in small groups, sold and then put back on board the ship. The operation of the entrepôt of Delos triggered a network of economic activities around it: for example, local manufactures produced small-scale goods that complemented the main ship-loads, shops and markets served for re-victualing the ships, and rooms were rented out to businessmen for short time stays – again like Hong Kong. In the following discussion, I will address the ways in which the areas around the harbours were developed in order to accommodate the entrepôt trade of Delos.

The main harbour zone

The main harbour zone is where the activities in relation to the “wholesale” trade of Delos took place (see Figure 3.3). Development in this zone started during the third century BC, with the establishment of Delos as a trade passage during the period of the independence of the island. The landfill (χωμα), mentioned in inscriptions from 217 BC onwards, was used to fill the waterfront towards the west of the sanctuary of Apollo.³⁶ This landfill created the areas where the Agora of the Hermaistai or the Kompetaliastai (GD 2), with accompanying shops α, β and γ, the Portico of Philip and the West Portico (GD 3) and the Agora of Theophrastos (GD 49) would later stand on.³⁷

The Agora of Theophrastos, named after the *epimeletes* that oversaw the completion of the construction works of the landfill just before 126/5 BC (ID 1645), featured a circular structure at its eastern edge, which is now submerged in the sea. An inscription informs us that Sokrates, an *agoranomos* active around 100 BC, installed this circular structure – a *kuklos* (κύκλος; ID 1835) –³⁸ which according to later sources was used for auctions of slaves as well as other commodities.³⁹ This circular structure must have been the place where slaves, together with other commodities, were sold. Merchandise would be set in the centre of the *kuklos* and interested individuals could place bids. Thus, slaves as well as other merchandise could be brought ashore in small groups, sold in the *kuklos*, and then put back on board the ship.⁴⁰

Towards the south, due to the same landfill and roughly at the same time as the Agora of Theophrastos, in between 130 and 120 BC, the Agora of the Hermaistai or the Kompetaliastai was created on a previously established square.⁴¹ The volume standards for liquids, or *sekomata*, found in the shops of this area, and accompanying inscriptions indicate that the square and adjoining shops were dedicated for selling soil and wine, according to the Athenian standards of volume, and overseen by the Athenian *epimeletes* Ariarathes at the beginning of the first century BC.⁴² The volume standards found in this area have a significantly larger capacity – that is 35–9 liters – than the volume standards found in the shops that were further away from the harbour, inside the Theatre District that is located to the southeast of the Agora.⁴³ This suggests that while the measures found in the residential neighbourhoods served the local retail trade of shops, the measures of the Agora of the Kompetaliastai were used for calculating the oil and wine for the ships’ food supplies.⁴⁴

In sum, the Agora of Theophrastos was the place for the auctions of the Delian emporion and the Agora of the Hermaistai or the Kompetaliastai the place for re-victualing the ships. It is clear that the waterfront development, a construction in operation since the end of the third century BC that Theophrastos completed in about 125 BC, was a necessary action for creating areas where these operations of the emporion could take place.⁴⁵

Integration of economic activities in the residential neighbourhoods

While the activities of the emporion of Delos took place in the main harbour zone, the residential neighbourhoods accommodated a network of small-scale economic activities that were developed due to the operation of the trading port (see Figure 3.2). Owners transformed their houses in order to accommodate commercial, manufacturing, and storage uses. One solution, for example, was to break down the larger rooms of the ground floor, the typical reception rooms,⁴⁶ to form smaller rooms that accommodated workshops, shops and groups of rooms that could be rented out; for instance, the House of the Seals (*Maison des Sceaux*, GD 59 D, see Figure 3.4) in the Skardhana District,⁴⁷ and the House ID in the Stadion District.⁴⁸ Another solution was to keep the original architectural organisation and extend the house in order to add a group of rooms; for instance, small rooms were subsequently added outside the House of the Tritons (*Maison des Tritons*) and the House of the Actors (*Maison des Comédiens*, GD 59 B) in the Skardhana District (see Figure 3.5), taking over part of the street (rooms D and E to House of the Actors; rooms AI-AI'-AJ-AK-AK'-AL-AM-AN to House of the Tritons), in order to create spaces for service, storage as well

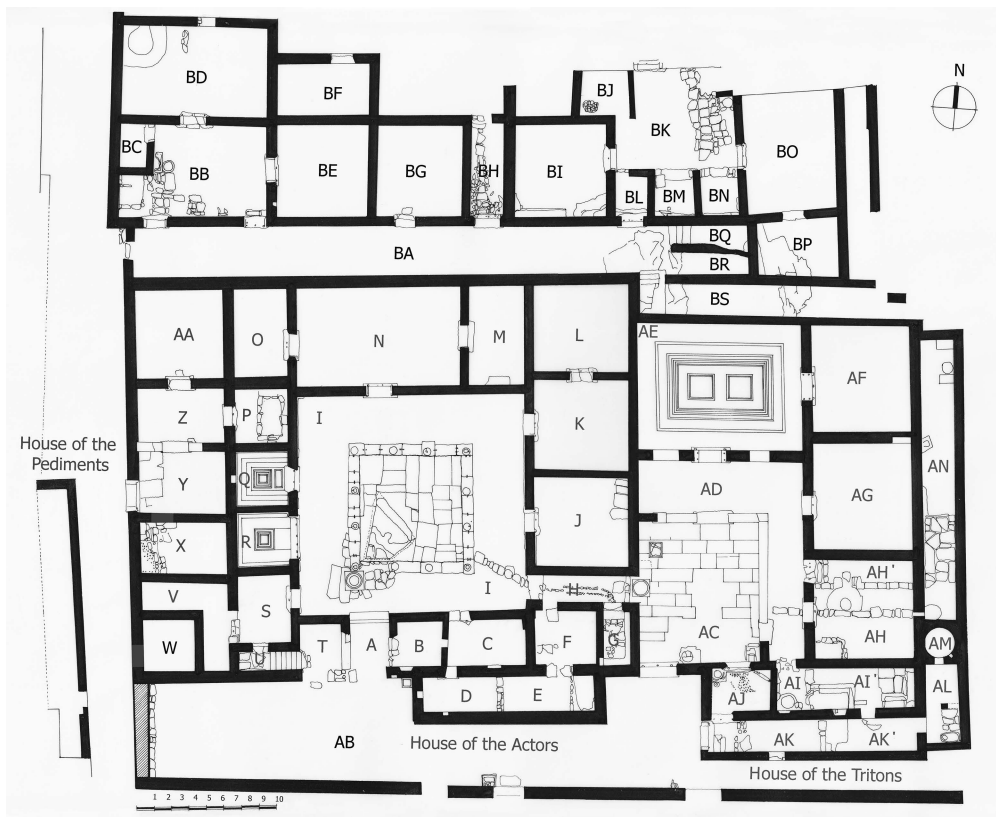


Figure 3.5 House of the Actors and House of the Tritons in the North District, plan

Source: © Mantha Zarmakoupi, after Bruneau et al. 1970, pl. A.

as workshops. Alternatively, owners used the available space to accommodate their needs and there was no architectural reorganisation. For example, House III O in the Theatre District was transformed into an oil workshop;⁴⁹ House VI B in the Theatre District into a workshop of a coroplast;⁵⁰ and a marble workshop was installed in rooms 8 and 10 of the House of Kerdon (*Maison de Kerdon*, GD 83).⁵¹

By transforming either the architectural organisation of the houses or the use of spaces within the houses, owners created new spatial arrangements in order to generate profit in the dynamic economy of the island in this period. These changes were implemented reactively in order to fit the needs of the inhabitants and their commercial activities, the scale of which was not foreseen. The shops and workshops that were integrated in the Delian houses provide evidence for a small-scale economy that operated alongside the trading centre of Delos and grew because of its operation.⁵²

The emporion and the urban development of Delos

The creation of two new neighbourhoods next to natural harbours shows, on the one hand, the growth of the population at this time and, on the other, the need for more spaces next to harbour facilities (see Figure 3.2). The two new neighbourhoods, the Skardhana and Stadion Districts were created some decades after the operation of the entrepôt of Delos. The Skardhana District was built around 130 BC and the Stadion District towards the end of the first century BC. Both neighbourhoods went out of use in 69 BC, when the pirate Athenadoros sacked the island – so the Skardhana District was occupied for 60 years and the Stadion District for 40 years.⁵³ Numerous changes were conducted over this relatively short period of time, which is telling about the dynamic character of the economic activities on the island in this period.

The changes in these new neighbourhoods show the inhabitants' constant effort to make the best of the available spaces near the harbour areas.⁵⁴ The capacity of the harbours of these neighbourhoods was significantly smaller and could accommodate smaller boats. We may speculate that in the case of these smaller harbour facilities, smaller in size and lighter in weight goods, such as perfumes, unguents, incense, gems and dyes, were being loaded on the boats as supplementary to their main cargo. Until recently however, these smaller harbours were not considered important for the Delian emporion and research had focused on the main harbour. The *UrbaNetworks* underwater investigation of the submerged areas of the Stadion District – a collaboration between the Department of Underwater Antiquities of the Hellenic Ministry of Culture and Sports and the Institute for Historical Research of the National Hellenic Research Foundation – proved otherwise.⁵⁵

In fact, we know very little about the ways in which the main harbour of Delos – the so-called Sacred Harbour – accommodated its maritime traffic as no underwater investigation has been conducted in this area. There is a relative sea-level rise in the Cyclades of about two m from the period under examination, so the main harbour as well as parts of the city of Delos have now been submerged – but this is not the reason for which the main harbour of Delos has not been investigated. The main problem is that the submerged structures of the main harbour have suffered irreversible changes, as the excavations in the nineteenth and twentieth centuries deposited the archaeological rubble on the sea floor and the new port installations were constructed over it. These new structures, and new underwater currents that they created, have resulted in irreversible changes to the remnants of the main harbour.⁵⁶

The UrbaNetworks underwater investigation of the submerged structures in the Stadion District identified the remains of a large commercial peristyle building situated along the ancient coastline,⁵⁷ which is comparable to the large commercial peristyle buildings on the west side of the island that are also located along the ancient coastline to the south of the main harbour. The identification of a facility that is associated with commercial activities so close to the ancient shoreline is an important finding for understanding the ways in which the city of Delos accommodated its emporion. As mentioned earlier, studies so far have focused on the area of the main harbour. The Stadion District was hitherto considered as a kind of suburb, since it seems now to be cut off from the west side of the island – it should be noted, however, that it is not really the case since there are unexcavated remains between the Stadion District and the sanctuary of Apollo indicating that this area was also inhabited.⁵⁸ The finds from the underwater investigation in the Stadion District prove, nonetheless, that this area had a very similar character to the areas next to the main harbour and was part of the Delian emporion.⁵⁹

Besides, if we consider the maritime routes connected to Delos (see Figure 3.6), we notice that approaching Delos from the east – say from Ephesos – the Stadion District is a more amenable harbour. In fact, this harbour is a better choice if one needs to avoid the strait between Mykonos and Delos, which is very difficult to cross with strong Etesian winds – the prevailing northern winds – and could also accommodate the maritime traffic coming from the marble quarry that is located at the southeast of Kynthos. Similarly, the harbour of the Skardhana District is a better choice when coming from the north – say from Chalkis – and facing south winds, which are not as frequent but really powerful when they occur.⁶⁰ The operation of an emporion need not have depended on a single harbour. Although the mechanisms of trade were weighted towards direct preferential links between emporia ports, rather than towards random coastal tramping or cabotage,⁶¹ an emporion has several harbours, which could serve according to the weather conditions. A selective coastal tramping around Delos



Figure 3.6 Map showing maritime connections in the Aegean according to ancient authors

Source: Arnaud 2005, 225.

would, in fact, allow skippers to avoid difficult crossings according to the weather conditions and seems to have been the preferred course of action. The use of the natural harbours around the island would, in fact, justify the urban growth of Delos during the late Hellenistic period, as the city extended next to natural harbours that could accommodate its emporion.

Conclusion

It is evident that the urban and economic expansion that Delos underwent in this period was unpredictable for the inhabitants of Delos. Even the new neighbourhoods were not sufficient to accommodate the growing population and small-scale economic activities on the island that grew because of the operation of the trading centre. The numerous changes in the organisation of the interiors of the houses within the neighbourhoods show the constant effort to make the best of the available spaces near the harbour areas.⁶² These changes were implemented reactively in order to fit the needs of the inhabitants and their commercial activities, the scale of which was not foreseen. Nothing could indeed have predicted this enormous urban and economic expansion of Delos in this period – neither the fame of the sanctuary, nor the quality of the harbours of Delos, nor the geographical position of Delos. The decision of Rome to grant the island the status of a free port combined with the destruction of Corinth, a powerful rival, in 146 BC, as well as the intensification of the relation of Rome and Pergamon for which Delos played an intermediary role, led to the development of the commercial cityscape of Delos.

In the late Hellenistic period, Delos became a “merchant city,” to embrace the concept of Max Weber⁶³ – a city maintained by its commerce, whose organisation and form were indeed shaped vis-à-vis handling and shipping activities as well as the micro-economy that developed alongside them. The urban development that Delos underwent in this period can be only understood in relation to both the operation of the emporion, the long-distance trade and the micro-scale economy that the emporion generated within the urban fabric. Delos has no walls to mark its boundaries, or gates and tombs to point to its entrance: the sea is the boundary and the harbours are the gates to the city of Delos. The coastline and harbours of Delos were the defining elements in the organisation of the city, embodying Purcell’s notion of the *ora maritima* – not as a mere geographical term, but a systematization of human resources.⁶⁴ Operating between the micro- and macro-scale economic activities of the emporion, the coastline of Delos defined and regulated the development of the city.

Notes

- * This research has been generously supported by the Marie Curie Intra-European Fellowship Scheme (FP7-PEOPLE-2012-IEF, Project Title: UrbaNetworks, Grant Agreement n° PIEF-GA-2012-331969). I am grateful to Panagiotis Hatzidakis for granting permission to conduct my study on Delos. I would also like to thank the French School in Athens for facilitating my research on the site. I am indebted to Véronique Chankowski for inviting me to participate in her research project on storage facilities on Delos (funded by the *Agence Nationale de la Recherche* [ANR]) and for her continuous support. I must also thank Jean-Charles Moretti, the director of the French excavations on Delos, for sharing his knowledge about the architecture of Delos. Finally, I would like to thank Theodoros Pantzaris for sharing with me the plan of the main harbour area of Delos by his father Gergios Pantzaris.

- 1 Hatzfeld 1912; Zaleskij 1982; Reger 1994. The growing commercial importance of the island of Delos was not only a consequence of the grant of ἀτέλεια in 167 BC, but also of other equally important developments such as the Roman destruction of Carthage and Corinth, the rapid collapse of the Seleucid Empire in the latter half of the century and the creation of the Roman province of Asia in 129 BC. For a summary of the events see McGing 2003, 83–4. Strabo says that the merchants changed their place of business from Corinth to Delos following the destruction of the former in 146 BC for two reasons: they were attracted first by τῆς ἀτελείας τοῦ ἱεροῦ and second by the good location of the harbour, “as it is on the sea-route from Italy and Greece to Asia” (Strabo 10.5.4). To quote Hatzfeld, “because Delos was a shrine, it had become an international town; because it was an international town, it became a place of commerce.” Hatzfeld 1919, 34, 36. See also discussion in Kay 2014, 197–206.
- 2 Constantakopoulou 2007, 38–58, 62–75.
- 3 Strabo, Pliny, Pausanias and Lucilius. Pausanias (3.23.3–6) described Delos at this time as the trading station of all Greece. Pliny (*Naturalis Historia* 34.9) reported that the *mercatus in Delo* was *concelebrante toto orbe*, more specifically after the development of the Roman shipping lane to Asia (so after 133 BC). The contemporary poet Lucilius referred to the mighty port of Puteoli as “a lesser Delos” (Paulus, ex Festo 88.4: ‘*Minorem Delum*’ *Puteolos esse dixerunt . . . unde Lucilius – inde Dicarchitum populos Delumque minorem* [=Lucilius 118]). On the Delian bronzes: Pliny *Naturalis Historia* 34.9; Cicero *Pro Sexto Roscio Amerino* 133. Other luxury items: spices, unguents, incense, gems, statues, metals, dyes, tapestries, textiles and linens.
- 4 On the port and dockside structures see also: Duchêne and Fraisse 2001.
- 5 The studies of the French School in Athens have been published in the series *Exploration archéologique de Délos*. The volumes dealing with the architecture of the residential neighbourhoods are vol. 8 (Theatre District), vol. 27 (North District, L’Îlot de la Maison des Comédiens) and vol. 38 (North District, L’Îlot des Bijoux, l’Îlot des Bronzes, la Maison des Sceaux). Recent studies in domestic architecture: Trümper 1998; Trümper 2005; Trümper 2007; Trümper 2010; Tang 2005; Nevet 2010, 63–88 (ch. 4, “Housing and cultural identity: Delos, between Greece and Rome”); Zarmakoupi 2013a; Zarmakoupi 2015a.
- 6 Bruneau 1968; Martin 1977; Trümper 2002. See also discussion in Zarmakoupi 2013b.
- 7 Papageorgiou-Venetas 1981. For criticisms of Papageorgiou-Venetas’s analysis see: Scranton 1982; Bruneau 1984; Kreeb 1984.
- 8 FP7-PEOPLE-2012-IEF, Project Title: *UrbanNetworks*, Grant Agreement n° PIEF-GA-2012–331969. See website of the project: <https://urbannetworks.wordpress.com>
- 9 For example: Martin 1977; Owens 1991.
- 10 For example: Bresson 2007–2008; Hansen and Nielsen 2004.
- 11 For example: Bringmann 2000.
- 12 For example: Heinzelmann 2002; Monteix 2010.
- 13 For instance, the German Research Foundation [DFG] Research Project, *Die hellenistische Polis als Lebensform*, www.poliskultur.de/, 2006–2012. The results of this research project that was funded by the Deutsches Forschungsgemeinschaft are published by Verlag Antike in the series *Die hellenistische Polis als Lebensform* (<http://verlag-antike.de/va/reihen/SPP>), e.g. Matthaei and Zimmermann 2009. Also important is the Danish project *UrbanNet (Urban Network Evolutions)* which is based in Aarhus and is funded by the Danish National Research Foundation (<http://urbnet.au.dk>, 2015 –). This project aims to address how “urban networks catalysed societal and environmental expansions and crises in the past” (<http://urbnet.au.dk/about-urbnet/>).
- 14 For example: Archibald et al. 2011.
- 15 On the *city* of Delos see: Reger 2004.
- 16 The Quartier du Théâtre, the Quartier de l’Inopos, the Quartier de Skardhana and the Quartier du Stade.
- 17 Hoepfner and Schwandner 1986: and revised edition: Hoepfner and Schwandner 1994.
- 18 See for instance one of the publications of the Harvard Project on the City: Koolhaas et al. 2001.
- 19 Roussel 1931; Tréheux 1952, 582, n. 3; Couilloud 1974, 307–35.

- 20 The catastrophic events occurring in Syria, Palestine and Cilicia, such as the Seleucid enslavement of rebellious natives in Judea in 160–30 BC, provide a context for the arrival of Syro-Palestinian traders in Delos (Rauh 1993, 46).
- 21 Tréheux (1992) gives 68 ethnics from Antioch, 64 from Berytos, two from Laodicea in Phoenicia, 47 from Alexandria, 35 from Laodicea in Syria, 32 from Hieropolis, 31 from Tyre, 23 from Sidon, 16 from Ascalon and 12 from Salamis. These groups organised themselves religiously as well as ethnically according to the worship of the gods of their homelands; for example: the merchants from Tyre formed themselves into the Herakliastai of Tyre (i.e. the worshippers of Tyrian Melkart): *ID* 1519. The merchants from Berytos comprised the Poseidoniastai of Berytos (worshippers of Berytian Baal): *ID* 1520, 1772–96.
- 22 The Roman-Italian religious associations – the *collegia* of the Hermaistai, Apolloniastai, Poseidoniastai and Kompetaliastai – represented the largest ethnic contingent of the island. Their importance can be gauged by the large number of Roman-Italian families recorded in each of them. Rauh 1993, 30, Table II: “Roman and Italian families producing *homines collegiorum* at Delos in the pre-Sullan era (Before 81 BC)”. Roman, Latin, Etruscan, Campanian, Apulian and Samnite *gentilicia* are attested in this list, as are Greek families from towns such as Heraclea, Neapolis and Tarentum. The majority of the Romaioi on Delos were slaves and freedmen. Given that the Romans worked through patronage, it should come as no surprise that estimates based on onomastics demonstrate that the majority of the Romaioi recorded at Delos were themselves slaves and freedmen of Hellenistic Greek and Syro-Phoenician origin who worked at Delos for Roman-Italian patron families and bore their nomenclature. Hatzfeld (1919) estimated that of 231 Romaioi recorded on the island, 88 were freeborn, 95 were *liberti*, and 48 were slaves. Rauh’s survey in 1993 of inscriptions published since 1919 contains an additional 300 Romaioi whose names can be split, in similar proportions to those found by Hatzfeld, between freeborn (118 or 40%) and slave-born (freedmen and slaves combined, 182 or 60%). Rauh 1993, 30–2. See also discussion in Kay 2014, 197–206.
- 23 Bruneau and Ducat 2005, 163–6 (GD 2, Agora of the Hermaistai or the Kompetaliastai), 213 (GD 49 Agora of Theophrastos, 258–9 (GD 84, Agora of the Delians). GD plus a number indicates the numbering of the monuments in the *Guide de Délos* (Bruneau and Ducat 2005).
- 24 Ardaillon 1896, 437–44; Jardé 1906; Pâris 1916, 30–61; Roussel [1916] 1987, 300–2.
- 25 Paris 1916, 61–2; Bruneau 1968, 658–64; Papageorgiou-Venetas 1981, 99–106; Duchêne and Fraisse 2001, 119–23 (part 2, ch. 5. “Les basins annexes”).
- 26 Moretti et al. 2015. The atlas will be shortly available in a GIS from, enabling users to incorporate into it results from new excavations (Briquet 2012).
- 27 Strabo, Pliny, Pausanias and Lucilius. Pausanias (3.23.3–6) described Delos at this time as the trading station of all Greece. Pliny (*Naturalis Historia* 34.9) reported that the *mercatus in Delo* was *concelebrante toto orbe*, more specifically after the development of the Roman shipping lane to Asia (so after 133 BC). The contemporary poet Lucilius referred to the mighty port of Puteoli as “a lesser Delos” (Paulus, ex Festo 88.4: ‘*Minorem Delum*’ *Puteolos esse dixerunt . . . unde Lucilius – inde Dicarchitum populos Delumque minorem* [=Lucilius 118]). On the Delian bronzes: Pliny *Naturalis Historia* 34.9; Cicero *Pro Sexto Roscio Amerino* 133. Other luxury items: spices, unguents, incense, gems, statues, metals, dyes, tapestries, textiles and linens.
- 28 Strabo says that Delos was capable of handling 10,000 slaves per day. Although this figure ought not to be taken literally, it should not be totally discarded either. See: Harris 1979, 82.
- 29 Cocco (1970) and Coarelli (1982, 2005) believe that the slave market may have been located in the Agora of the Italians. See extensive criticisms of this position in: Bruneau 1975, 1985, 1987, 331–9. Rauh (1992, 1993, 81–3, 289–338) argued that it was an arena for sport events. For counter-arguments against Rauh’s position see: Boussac and Moretti 1995. Recent review of all the arguments in Mastino 2008 and Tümpel 2009. Trümper (2008, 3–9, 93–8, with review of previous scholarship; 2009, 34–49) argues that the Agora of the Italians was not a slave market but rather a luxurious park-like building with a propylon, garden, double-storied porticoes, statue niches and a lavish bath suite. For a comprehensive discussion of the evidence related to slaves on Delos see: Bruneau 1989.

- 30 Purple-dye production: GD 79.1, GD 80.1 and at the bay of Fourni: Bruneau 1969, 1978, 110–14; Lytle 2007. Perfumeries: GD 79, GD 66, GD 50, GD 120, GD 118: Brun 1999, 2000. Sculpture ateliers: shops 103 and 106 at southwest corner of the Agora of the Italians (GD 52). See also discussion in Barr-Sharrar 1998. Bronzes: Bruneau 1976 (texts on Delian bronze); Siebert 1969, 1042–4; Siebert 1975, 721; Siebert 1976, 813–14 (House of the Seals [*Maison des Sceaux*], GD 59 D); Siebert 1973, 1979 (furniture appliqués). Glass production: shops to the west of the House of the Stuccoes (*Maison des Stucs*, GD 87), south of the Samothrakeion (GD 93) and in the area of the Aphrodision (GD 88): Nenna 1999; Durvy 2009. Fabrication of *auloi*: a boutique at the Granite Monument (*Monument du granit*, GD 54). Bélis 1998. Coroplastic workshops: shop at the south side of Agora of the Italians (GD 52), Theatre District (*Quartier du Théâtre*), Insula VI, House B. Laumonier 1956. In general see: Brunet 1998; Karvonis 2008.
- 31 Ardaillon 1896, 439–44; Jardé 1905, 16–40; Jardé 1906; Paris 1916, 56–61; Duchêne and Fraisse 2001, 95–118 (ch. 3, “Du port sacré à la pointe des pilasters,” and ch. 4, “Le littoral sud”). See also discussion in Interdonato 2007. Pavlos Karvonis and Jean-Jacques Malmay prepare a publication of these buildings in the series *Exploration Archéologique de Délos*. Some preliminary results of their study is published in: Karvonis 2008, 200–5; Karvonis and Malmay 2009, 218–26; Karvonis and Malmay 2012.
- 32 See note 28.
- 33 On ξενία see Husson 1983, 178–80. On the leasing of the houses that belonged to the sanctuary of Apollo on Delos: Molinier 1914. For a discussion of literary sources on leases and subleases of rooms within a house in early imperial Rome: Frier 1977 and Frier 1980. For rented accommodation in Pompeii see Pirson 1997 and Pirson 1999. For rented units in Ostia see Heinzlmann 2005.
- 34 Duchêne 1993, 125.
- 35 Hughes 1951, 18–23.
- 36 On the χώμα see: Moretti 1998, 259–61; Duchêne and Fraisse 2001, 147–53.
- 37 See discussion in: Hasenohr 2012a, 247–9; Hasenohr 2012b, 102–5; Zarmakoupi 2015b, 117–19. For the dates of the Portico of Philip (built towards 210 BC) and the West Portico (built around the middle of the third century BC) see: Vallois 1923; Roussel [1916] 1987, 294–7. The portico of Philip was built towards 210 BC. Vallois dated the South Portico to 180 BC, dedicated by Philip at the end of his reign or by Perseus, whereas Roussel suggested that it was built by the Athenians between 167 and 150 BC.
- 38 Moretti et al. 2012, 230–4. The inscription was written on two blocks, placed to the left and right of the entrance to the structure. First publication of the right block (no. 2): Roussel 1908, 420, no. 13bis. First publication of the entire inscription: Roussel (1916) 1987, 184.
- 39 See discussion of the sources in Moretti et al. 2012, 237–41.
- 40 This area must have been the location of the Athenian Agoranomion, the office regulating the transactions of the agora, as numerous inscriptions of agoranomoi, dating from 156 BC down to the 90 BC, were found in this area. Moretti et al. 2012, 241–5. The inscriptions (*ID* 1500, 1505, 1648, 1649, 1833, 1834, 1835, 1836, 1837, 2381) are listed in Table 1 on pages 242–3. For an analysis of the function of the Agoranomion see Capdetrey and Hasenohr 2012.
- 41 Hasenohr 2002, 2004–05. The agora was embellished with porticoes that fronted the east and south facades of the square, which gave access to shops α, β and γ: Hasenohr 2002, 91–9, 2014, 303–5. For a discussion of the history of this area, see: Hasenohr 2014.
- 42 Hasenohr 2012a, 252–62; Chankowski and Hasenohr 2015, 29–36. There are five inscribed *sekomata* and one that is not inscribed. The inscribed *sekomata* are *ID* 1847, 1827, 1828, 1829 as well as one that is unpublished (no. 4 in Hasenohr 2012a and Chankowski and Hasenohr 2015). A decree from Athens dated to the last quarter of the second century mentions the new standards for measures (*IG* II2 1013): Viédebantt 1916; Breglia Pulci Doria 1985; Habicht 1997, 291; Austin 2006, no. 129, 238–40; Doyen 2012, 148–50; Chankowski and Hasenohr 2015, 37–9. The Athenian epimeletes would have implemented those on Delos at this time: Hasenohr 2012a, 260; Chankowski and Hasenohr 2015, 33–6.
- 43 See discussion in Hasenohr 2012a, 257–9; cf. catalogue of Déonna 1938, 176–85.
- 44 See discussion in Hasenohr 2012a (esp. 260–1) and Hasenohr 2012b (esp. 99–105). Furthermore, the shops in this area were significantly bigger than the shops located inside the

- Theatre District and were furnished with mezzanines that could accommodate the storage needs of this trade (Karvonis and Malmay 2012, 272–4).
- 45 For a discussion of the locations of the emporion see discussion in Hasenohr 2012a and Hasenohr 2012b.
- 46 The common arrangement of the Delian houses was to have a large luxurious room with direct access from the peristyle – which in modern scholarship has been given the name *oecus maior*. This room then provided access to one or two smaller rooms – the so-called *oeci minores*. Chamonard coined the terms: Chamonard 1922–24, 168–76. See also Trümper 1998, 17–18. For a discussion of the scholarship on the Delian houses see Zarmakoupi 2013a. Although this arrangement can be noticed in the majority of the Delian houses, quite a few houses do not fit into this scheme. Although recent studies have gone beyond these early typological analyses to address modest housing units, among other things (Trümper 1998, 2005, 2007, 2010; Tang 2005; Nevett 2010, 63–88; ch. 4, “Housing and cultural identity: Delos, between Greece and Rome”), they have not recognised that changes in the architectural organisation of the Delian houses were a result of the growing urban economy of the city of Delos.
- 47 Siebert 2001, 85–98 (ch. 3, “La Maison des Sceaux”).
- 48 See also discussion in Zarmakoupi 2013b.
- 49 Brun and Brunet 1997, 586–9; Trümper 2003, 157.
- 50 Chamonard 1922–24, vol. 1, 53, 214, 221; Laumonier 1956, 18–19; Déonna 1948, 69, 72–3; Trümper 1998, 292.
- 51 Jardé 1905, 47–54; Jockey 1995, 12; Brunet 1998, 684.
- 52 See also discussion in Zarmakoupi 2013a.
- 53 The sack of the island by Athenadoros in 69 BC provides a final date for the use of both neighbourhoods. In the case of the Skardhana District, this is attested by the fire of the House of the Seals, the destruction and abandonment evident in the surrounding houses, as well as the scarce ceramic and coin finds after this date. In the case of the Stadion District, it is indicated by the exclusion of the neighbourhood from the fortification of Triarius, built at this time in order to protect the city from Athenadoros, as well as the scarce ceramic and coin finds after this date. Bruneau 1968 (658–91) collects the evidence for coins and ceramics from the neighbourhood and discusses the extent of development of the city of Delos. On the wall of Triarius, see the forthcoming study of Stephanie Maillot and Myriam Fincker (ID1955, ID2641, ID4771 in *Chroniques de fouilles en ligne*: www.chronique.efa.gr/). See also discussion in: Zarmakoupi 2015b, 127–8.
- 54 For a discussion of the development of the neighbourhoods in relation the port facilities see: Zarmakoupi 2015c.
- 55 Zarmakoupi and Athanasoula (forthcoming). See also information at the website of UrbanNetworks (<https://urbannetworks.wordpress.com/underwater-fieldwork-project/>) as well as the press releases of the Hellenic Ministry of Culture and Sports (www.yppo.gr/2/g22.jsp?obj_id=61632) and the National Hellenic Research Foundation (www.eie.gr/nhrf/institutes/ihr/news/2015/15_07_2015_PRESS_Delos2015_en.pdf).
- 56 Desruelles et al. 2007, 232–5, fig. 3. Previous research on the harbour facilities of the island – notably of the École Française d’Athènes – has focused on this area. Two mooring bits have been found in the Agora of Theophrastus and next to the Stoa of Philip, one of which is inscribed, indicating that this the border of the basin for long boats (ὅρος ὅρμ[ου] μακρῶν π[λοίων]), that is of the warships (cf. Herodotus 6.48.2. Duchêne and Fraisse 2001, 153–4). This inscription has led to the hypothesis that the sacred port was divided into two areas: an area for war vessels and one for the commercial vessels. Probably the first one was located next to the sanctuary of Apollo and the second from the Agora of the Hermaistai or the Kompetaliastai up to the large commercial installations located to the south, where a number of mooring bits have been found. Since these underwater areas have been disrupted, no underwater research has been so far conducted in order to date and clarify these matters. In addition, the study of core samples from the basin of the central harbour has confirmed that the sea level has risen by 2 to 2.5 meters from the Late Hellenistic period and suggested that the westward boundaries of these regions were at a distance of about 20 meters from the existing shoreline. See: Duchêne και Fraisse 2001, 174–6; Desruelles et al. 2004; Fouache et al. 2005; Dalongeville et al. 2007; Desruelles et al. 2007, 236–7. Étienne 2008. Desruelles et al. 2009; Mourtzas 2011. See also discussion in Zarmakoupi 2015b, 119.

- 57 Some of these underwater remains had been previously identified and published as harbour remains by Alexandros Papageorgiou-Venetas (1981, 106). The UrbaNetworks underwater survey determined that they are settlement remains, not harbour facilities. Specifically, we located and documented two spaces, one at a depth of about two m and about 30–5 m from the shoreline, and a second at a depth of 70 centimeters and a distance of ten m from the shoreline. Both spaces featured pots that were fixed in the floor. The two spaces of the Stadion District, however, feature a large number of fixed pots – specifically, 18 pots have survived in each room – and it seems more likely that these spaces were part of some kind of shop, or workshop, and that these pots were used for storage. Both spaces seem to belong to one large building that featured a peristyle courtyard, as numerous fragments of columns have been found in its middle area. In addition, a series of large stone blocks were found to the south of the east end of the building, which probably formed the waterfront of the settlement at the eastern end of the Stadium. The building is therefore located at the eastern edge of the district along the ancient coastline-which was artificially formed (Zarmakoupi and Athanasoula (forthcoming) and Zarmakoupi 2015b, 124–6). See also information at the website of UrbaNetworks (<https://urbanetworks.wordpress.com/underwater-fieldwork-project/>) as well as the press release of the National Hellenic Research Foundation (www.eie.gr/nhrf/institutes/ihr/news/2015/15_07_2015_PRESS_Delos2015_en.pdf).
- 58 See the new atlas of Delos: Moretti et al. 2015, plate 5.
- 59 It is possible that the small bay to the north of the neighbourhood in the area of Gournas served as an anchorage during the late Hellenistic period in order to complement the activities of the main port, and an anchor found in this bay in 2003 supports this hypothesis.
- 60 For a discussion of the maritime routes in the Aegean on the basis of the ancient sources, see: Arnaud 2005, 223–7 and map on p. 225. For a discussion of the prevailing winds and the sailing seasons see: Beresford 2013, 79–85.
- 61 Arnaud 2005, 107–27.
- 62 For a discussion of the development of the neighbourhoods in relation the harbour facilities see: Zarmakoupi 2015c.
- 63 Weber 1958, 70–1. Relying on Weber’s conceptualization of city models, Finley (1977 [1981], 1987–89) has argued that the Greek polis is a “consumer city.” However this view has been strongly challenged. See: Bresson 2000.
- 64 Purcell 1996, 274. The expression is by Cicero, *Nat. D.* 3.91, “*hi duos illos oculos orae maritimae effodierunt.*” Purcell interprets this as: the port as an eye of the city (Purcell 1996, 271–2). Puteoli was one of a group of five colonies in *ora maritima*, the other four being Liternum, Volturnum, Salernum and Brundisium (Livy 32.29.3), D’Arms 1970, 1.

Bibliography

- Archibald, Z.H., J.K. Davies, and V. Gabrielsen (eds.) 2011. *The Economies of Hellenistic Societies, Third to First Centuries BC*. Oxford and New York: Oxford University Press.
- Ardaillon, E. 1896. “Rapport sur les Fouilles du Port de Délos.” *BCH* 20: 428–45.
- Arnaud, P. 2005. *Les routes de la navigation antique: itinéraires en Méditerranée*. Paris: Errance.
- Austin, M.M. 2006. *The Hellenistic World from Alexander to the Roman Conquest: A Selection of Ancient Sources in Translation*, 2nd augmented ed. Cambridge and New York: Cambridge University Press.
- Barr-Sharrar, B. 1998. “Some Observations Concerning Late Hellenistic Bronze Production on Delos.” In O. Palagia and W.D.E. Coulson (eds.), *Regional Schools in Hellenistic Sculpture: Proceedings of an International Conference Held at the American School of Classical Studies at Athens, March 15–17, 1996*, 185–98. Oxford: Oxbow.
- Bélis, A. 1998. “Les Fabricants d’Auloi en Grèce: L’Exemple de Délos.” *Topoi* 8: 784–6.
- Beresford, J. 2013. *The Ancient Sailing Season, Mnemosyne Supplement: History and Archaeology of Classical Antiquity*, 351. Leiden and Boston, MA: Brill.
- Boussac, M-F., and J-C. Moretti. 1995. “Review of N. K. Rauh: *The Sacred Bonds of Commerce: Religion, Economy, and Trade Society at Hellenistic Roman Delos*, 1993.” *Topoi* 5: 561–72.

- Breglia Pulci Doria, L. 1985. "Per la Storia di Atene alla Fine del II Sec. A. C. Il Decreto sui Pesi e Misure: IG II² 1013." *MÉFRA* 97: 411–30.
- Bresson, A. 2000. *La Cité Marchande*, Scripta Antiqua 2. Bordeaux: Ausonius.
- Bresson, A. 2007–2008. *L'économie de la Grèce des cités (fin VIe-Ier siècle a.C.)*, 2 vols, vol. 1. Les structures et la production–vol. 2. Les espaces de l'échange. Paris: Armand Colin.
- Bringmann, K. (ed.) 2000. *Schenkungen hellenistischer Herrscher an griechische Städte und Heiligtümer 2. Historische und archäologische Auswertung 1. Historische Auswertung. Geben und Nehmen. Monarchische Wohltätigkeit und Selbstdarstellung im Zeitalter des Hellenismus. Mit einem numismatischen Beitrag von Hans-Christoph Noeske*. Berlin: Akademie Verlag.
- Briquet, Q. 2012. "Mise en place d'un WebSIG de l'île de Délos (Cyclades)." *Géomatique expert* 87, July–August: 30–43.
- Brun, J-P. 1999. "*Laudatissimum fuit Antiquitus in Delo Insula*. La Maison IB du Quartier Du Stade et la Production des Parfums à Délos." *BCH* 123: 87–155.
- Brun, J-P. 2000. "The Production of Perfumes in Antiquity: The Cases of Delos and Paestum." *AJA* 104: 277–308.
- Brun, J-P., Brunet, J-P., and M. Brunet. 1997. "Une Huilerie du Premier Siècle avant J.-C. dans Le Quartier du Théâtre à Délos." *BCH* 121: 573–615.
- Bruneau, P. 1968. "Contribution à l'Histoire Urbaine de Délos à l'Époque Hellénistique et à l'Époque Impériale." *BCH* 92: 633–709.
- Bruneau, P. 1969. "Documents sur l'Industrie Délienne de la Pourpre." *BCH* 93: 759–91.
- Bruneau, P. 1975. "Deliaca." *BCH* 99: 267–311.
- Bruneau, P. 1976. "D'un Lacedaemonius Orbis à l'Aes Deliacum." In A. Plassart (ed.), *Recueil Plassart: Études sur l'Antiquité Grecque Offertes à André Plassart par ses Collègues de la Sorbonne*, 36–45. Paris: Société d'édition Les Belles Lettres.
- Bruneau, P. 1978. "Deliaca (II)." *BCH* 102: 109–71.
- Bruneau, P. 1982. "Les Israélites de Délos et la Juiverie Délienne." *BCH* 106: 465–504.
- Bruneau, P. 1984. "Revue de: Alexandre Papageorgiou-Venetas: *Délos. Recherches Urbaines sur une Ville Antique* (Berlin 1981)." *Gnomon* 56: 733–7.
- Bruneau, P. 1985. "Deliaca (V)." *BCH* 109: 557–64.
- Bruneau, P. 1987. "Deliaca (VI)." *BCH* 111: 313–42.
- Bruneau, P. 1989. "L'Esclavage à Délos." In M-M. Mactoux and E. Geny (eds.), *Mélanges Pierre Lévêque. Tome 3. Anthropologie et Société*, 41–52. Paris.
- Bruneau, P., C. Vatin, U. Bezerra de Meneses, G. Donnay, E. Lévy, A. Bovon, G. Siebert, V. R. Grace, M. Savvatiannou-Pétropoulakou, E. Lyding Will and T. Hackens. 1970. *L'îlot de la maison des comédiens. Délos 27*. Paris: de Boccard.
- Bruneau, P., and J. Ducat. 2005. *Guide De Délos*, 4th augmented and reworked ed. Athens and Paris: École française d'Athènes and de Boccard.
- Brunet, M. 1998. "L'Artisanat dans la Délos Hellénistique: Essai de Bilan Archéologique." *Topoi* 8: 681–91.
- Capdetrey, L., and C. Hasenohr. 2012. "Surveiller, Organiser, Financer: Fonctionnement de l'Agoronomia et Statut des Agoranomes dans le Monde Égéen." In L. Capdetrey and C. Hasenohr (eds.), *Agoranomes et Édiles: Institutions des Marchés Antiques*, 13–34. Bordeaux: Ausonius.
- Chamonard, J. 1922–24. *Le Quartier du Théâtre: Étude sur l'Habitation Délienne à l'Époque Hellénistique*, 3 vols., *Délos* 8. Paris: de Boccard.
- Chankowski, V., and C. Hasenohr. 2015. "Étalons et Tables de Mesure à Délos Hellénistique: Évolutions et Ruptures." In C. Saliou (ed.), *La Mesure et ses Usages dans l'Antiquité: La Documentation Archéologique*, 21–39. Besançon Cedex: Presses Univ. de Franche-Comté.
- Coarelli, F. 1982. "L'Agora des Italiens' a Delo: Il Mercato degli Schiavi?" In F. Coarelli, D. Musti, and H. Solin (eds.), *Delo e l'Italia, OpFin* 2, 188–224. Rome: Bardi editore.
- Coarelli, F. 2005. "L' 'Agora Des Italiens': Lo Statarion di Delo?" *JRA* 18: 196–212.
- Cocco, M. 1970. "Sulla Funzione dell' 'Agora degli Italiani' di Delo." *PP* 25: 446–9.

- Constantakopoulou, C. 2007. *The Dance of the Islands: Insularity, Networks, the Athenian Empire, and the Aegean World*, Oxford Classical Monographs. Oxford and New York: Oxford University Press.
- Couilloud, M-T. 1974. *Les Monuments Funéraires de Rhénée, Délos* 30. Paris: de Boccard.
- D'Arms, J.H. 1970. *Romans on the Bay of Naples: A Social and Cultural Study of the Villas and Their Owners From 150 B.C. to A.D. 400*. Cambridge: Harvard University Press.
- D'Arms, J.H. 2003. "Romans on the Bay of Naples: A Social and Cultural Study of the Villas and Their Owners From 150 B.C. to A.D. 400." In F. Zevi (ed.), *Romans on the Bay of Naples and Other Essays on Roman Campania*. Bari-S. Spirito: Edipuglia.
- Dalongeville, R., S. Desruelles, E. Fouache, C. Hasenohr, and K. Pavlopoulos. 2007. "Hausse relative du niveau marin à Délos (Cyclades, Grèce): rythme et effets sur les paysages littoraux de la ville hellénistique." *Méditerranée* 108: 17–28.
- Déonna, W. 1938. *Le Mobilier Délien, Délos* 18. Paris: de Boccard.
- Déonna, W. 1948, *La vie privée des Déliens*. École française d'Athènes. Travaux et mémoires. Paris: de Boccard.
- Desruelles, S., E. Fouache, A. Ciner, R. Dalongeville, K. Pavlopoulos, E. Kosun, Y. Coquinot, and J-L. Potdevin. 2009. "Beachrocks and Sea Level Changes Since Middle Holocene: Comparison Between the Insular Group of Mykonos – Delos – Rhenia (Cyclades, Greece) and the Southern Coast of Turkey." *Global and Planetary Change* 66: 19–33.
- Desruelles, S., E. Fouache, R. Dalongeville, K. Pavlopoulos, J-P. Peulvast, Y. Coquinot, J-L. Potdevin, C. Hasenohr, M. Brunet, R. Mathieu, and E. Nicot. 2007. "Sea-Level Changes and Shoreline Reconstruction in the Ancient City of Delos (Cyclades, Greece)." *Geodinamica Acta* 20, no. 4: 231–9.
- Desruelles, S., E. Fouache, K. Pavlopoulos, R. Dalongeville, J-P. Peulvast, Y. Coquinot, and J-L. Potdevin. 2004. "Beachrocks et variations récentes de la ligne de rivage en Mer Egée dans l'ensemble insulaire Mykonos-Délos-Rhénée (Cyclades, Grèce)." *Géomorphologie: relief, processus, environnement* 1: 5–18.
- Doyen, C. 2012. *Études de Métrologie Grecque II: Étalons de l'Argent et du Bronze en Grèce Hellénistique*. Louvain-la-Neuve: Association Professeur Marcel Hoc.
- Duchêne, H. 1993. "Délos, Réalités Portuaires et Emporion." In A. Bresson and P. Rouillard (eds.), *L'Emporion*, 113–25. Paris: Publications du Centre Pierre Paris (URA 991) 26.
- Duchêne, H., and P. Fraisse. 2001. *Le Paysage Portuaire de la Délos Antique: Recherches sur les Installations Maritimes, Commerciales et Urbaines du Littoral Délien, Délos* 39. Athens and Paris: École française d'Athènes and de Boccard.
- Durvy, C. 2009. "Recherches Récentes à Délos: L'Aphrodision de Stésiléôs." *RA* 47: 198–207.
- Etienne, R. 2008. "La terrasse du Grand Temple et le Sanctuaire d'Apollon." *BCH* 132, no. 2: 807–16.
- Finley, M.I. 1977. "The Ancient City From Fustel de Coulanges to Max Weber and Beyond." *Comparative Studies in Society and History* 19: 305–27. (= M.I. Finley [1981]. In B.D. Shaw and R.P. Saller [eds], *Economy and Society in Ancient Greece* [London: Chatto and Windus]: 3–23).
- Finley, M.I. 1981. "The Ancient City From Fustel de Coulanges to Max Weber and Beyond." In B.D. Shaw and R.P. Saller (eds.), *Economy and Society in Ancient Greece*, 3–23. London: Chatto and Windus.
- Finley, M.I. 1987–89. "The City." *Opus* 6–8: 303–13.
- Fouache, E., S. Desruelles, K. Pavlopoulos, R. Dalongeville, Y. Coquinot, J-P. Peulvast, and J-L. Potdevin. 2005. "Using Beachrocks as Sea Level Indicators in the Insular Group of Mykonos, Delos and Rhenia (Cyclades, Greece)." *Zeitschrift für Geomorphologie Suppl.* 137: 37–43.
- Frier, B.W. 1977. "The Rental Market in Early Imperial Rome." *JRS* 67: 27–37.
- Frier, B.W. 1980. *Landlords and Tenants in Imperial Rome*. Princeton, NJ.
- Habicht, C. 1997. *Athens From Alexander to Antony*. Cambridge, MA and London: Harvard University Press.

- Hansen, M.H., and T.H. Nielsen. 2004. *An Inventory of Archaic and Classical Poleis*. Oxford and New York: Oxford University Press.
- Harris, W. 1979. *War and Imperialism in Republican Rome 327–70 B.C.* Oxford: Clarendon Press.
- Hasenohr, C. 2002. “L’Agora des Compétaliastes et ses Abords à Délos: Topographie et Histoire d’un Secteur Occupé de l’Époque Archaique aux Temps Byzantins.” *RÉA* 104: 85–110.
- Hasenohr, C. 2004–05. “L’Agora des Compétaliastes.” *BCH* 128–9: 882–907.
- Hasenohr, C. 2012a. “Ariarathès, Épimélète de l’Emporion et les Magasins du Front de Mer à Délos.” In V. Chankowski and P. Karvonis (eds.), *Tout Vendre, Tout Acheter. Structures et Équipements des Marchés Antiques. Actes du Colloque International d’Athènes* (GDRI, ÉfA, Société Archéologique d’Athènes), 16–19 Juin 2009, *Scripta Antiqua* 42, 247–62. Bordeaux and Athens: Ausonius and École française d’Athènes.
- Hasenohr, C. 2012b. “Athènes et le Commerce Délien: Lieux d’Échange et Magistrats des Marchés à Délos Pendant la Seconde Domination Athénienne (167–88 a.c.).” In K. Konuk (ed.), *Stephanèphoros: De l’Économie Antique à l’Asie Mineure. Hommages à Raymond Descat*, *Mémoires* 28, 95–109. Bordeaux: Ausonius.
- Hasenohr, C. 2014. “Le bas Quartier du Théâtre à Délos à l’époque impériale.” *ΤΟΠΟΙ. Orient Occident* 19: 291–308.
- Hatzfeld, J. 1912. “Les Italiens Resident à Délos.” *BCH* 36: 5–218.
- Hatzfeld, J. 1919. *Les Trafiquants Italiens dans l’Orient Hellénique*. Paris: de Boccard.
- Heinzelmann, M. 2002. “Bauboom und urbanistische Defizite – Beobachtungen zur städtebaulichen Entwicklung Ostias in der hohen Kaiserzeit.” *Acta Instituti Romani Finlandiae* 27: 103–21.
- Heinzelmann, M. 2005. “Die Vermietete Stadt. Zur Kommerzialisierung und Standardisierung der Wohnkultur in der Kaiserzeitlichen Großstadtgesellschaft.” In R. Neudecker and P. Zanker (eds.), *Lebenswelten: Bilder und Räume in der Römischen Stadt der Kaiserzeit: Symposium am 24. und 25. Januar 2002 zum Abschluss des von der Gerda Henkel Stiftung geförderten Forschungsprogramms “Stadtkultur in der römischen Kaiserzeit”*, *Palilia* 16, 113–28. Wiesbaden: Dr. Ludwig Reichert.
- Hoepfner, W., and E.-L. Schwandner. 1986. *Haus Und Stadt Im Klassischen Griechenland*, Wohnen in der klassischen Polis 1. Munich: Deutscher Kunstverlag.
- Hoepfner, W., and E.-L. Schwandner. 1994. *Haus Und Stadt Im Klassischen Griechenland*, Wohnen in der klassischen Polis 1, 2nd revised ed. Munich: Deutscher Kunstverlag.
- Hughes, R.H. 1951. “Hong Kong: An Urban Study.” *The Geographical Journal* 117: 1–23.
- Husson, G. 1983. *Oikia: Le Vocabulaire de la Maison Privée en Egypte d’Après les Papyrus Grecs*. Paris: Publications de la Sorbonne.
- Interdonato, C. 2007. “Delo e il Suoi Porti in Età Ellenistica. Alcune Considerazioni Topografiche sul la Région des Magasins.” In C.G. Malacrino and E. Sorbo (eds.), *Architetti, Architettura e Città nel Mediterraneo Antico*, 202–16. Milan: Mondadori.
- Jardé, A. 1905. “Fouilles de Délos, Exécutées aux Frais de M. Le Duc de Loubat (1904).” *BCH* 29: 5–54.
- Jardé, A. 1906. “Fouilles dans le Quartier Marchand (1904).” *BCH* 30: 632–64.
- Jockey, P. 1995. “Techniques et Ateliers de Sculpture à Délos à l’Époque Hellénistique.” *Les Nouvelles de l’Archéologie* 60: 11–14.
- Karvonis, P. 2008. “Les Installations Commerciales dans la Ville de Délos à l’Époque Hellénistique.” *BCH* 132: 153–219.
- Karvonis, P., and J.-J. Malmay. 2009. “Étude Architecturale de Quatre Pièces Polyvalentes Du Quartier du Théâtre à Délos.” *BCH* 133: 195–226.
- Karvonis, P., and J.-J. Malmay. 2012. “Du Quartier à l’Agora: Étude de Cas dans le Quartier du Théâtre à Délos.” In V. Chankowski and P. Karvonis (eds.), *Tout Vendre, Tout Acheter. Structures et Équipements des Marchés Antiques. Actes du Colloque International d’Athènes*

- (GDRI, ÉfA, Société Archéologique d'Athènes), 16–19 Juin 2009, Scripta Antiqua 42, 263–75. Bordeaux and Athens: Ausonius and École française d'Athènes.
- Kay, P. 2014. *Rome's Economic Revolution*, Oxford Studies on the Roman Economy. Oxford: Oxford University Press.
- Koolhaas, R., S. Boeri, S. Kwinter, N. Tazi, H.U. Obrist, F. Fort, and M. Jacques. 2001. *Mutations*. Bordeaux: Arc en rêve centre d'architecture.
- Kreeb, M. 1984. "Review of: *Délos. Recherches Urbaines Sur Une Ville Antique* by A. Papageorgiou-Venetas (Berlin 1981)." *GGA* 236: 139–56.
- Laumonier, A. 1956. *Les Figurines de Terre Cuite, Délos* 23. Paris: de Boccard.
- Lytle, E. 2007. "The Delian Purple and the *Lex Portus Asiae*." *Phoenix* 61: 247–69.
- Martin, R. 1977. *L'urbanisme dans la Grèce antique*, 2nd augmented ed. Paris: Picard.
- Mastino, A. 2008. "Il Dibattito sull'agorà degli Italici a Delo: Un Bilancio Retrospectivo fra Ideologia e Urbanistica." In S. Angiolillo, S. Boldrini, and P. Braconi (eds.), *Il Perle e il Filo: A Mario Torelli*, 233–42. Venosa: Osanna.
- Matthaei, A., and M. Zimmermann. 2009. *Stadtbilder im Hellenismus*, Die hellenistische Polis als Lebensform 1. Frankfurt am Main: Verlag Antike.
- McGing, B. 2003. "Subjection and Resistance: To the Death of Mithradates." In A. Erskine (ed.), *A Companion to the Hellenistic World*, 71–89. Oxford: Blackwell.
- Molinier, S. 1914. *Les "Maisons Sacrées" de Délos au Temps de l'Indépendance de l'Île (315–166/5 av. J.-C.)*, Bibliothèque de la Faculté des Lettres 31. Paris: Université de Paris.
- Monteix, N. 2010. *Les lieux de métier: Boutiques et ateliers d'Herculanum*, Bibliothèque des Ecoles Françaises de Rome et d'Athènes 344. Rome: École française de Rome.
- Moretti, J-C. 1998. "Un Monument Archaique à Délos sur le Front Mer." *RA* 2: 227–62.
- Moretti, J-C., L. Fadin, M. Fincker, and V. Picard. 2015. *L'Atlas de Délos*, Exploration Archéologique de Délos 43. Paris and Athens: de Boccard and École française d'Athènes.
- Moretti, J-C., M. Fincker, and V. Chankowski. 2012. "Un Édifice Commercial de L'Agora de Théophrastos à Délos." In V. Chankowski and P. Karvonis (eds.), *Tout Vendre, Tout Acheter. Structures et Équipements des Marchés Antiques. Actes du Colloque International d'Athènes (GDRI, ÉfA, Société Archéologique d'Athènes), 16–19 Juin 2009*, Scripta Antiqua 42, 225–46. Bordeaux and Athens: Ausonius and École française d'Athènes.
- Mourtzas, D. 2011. "A Palaeogeographic Reconstruction of the Seafront of the Ancient City of Delos in Relation to Upper Holocene Sea Level Changes in the Central Cyclades." *Quaternary International* 30: 1–16.
- Nenna, M-D. 1999. *Les Verres, Délos* 23. Athens and Paris: de Boccard and École française d'Athènes.
- Nevett, L.C. 2010. *Domestic Space in Classical Antiquity*. Cambridge: Cambridge University Press.
- Owens, E.J. 1991. *The City in the Greek and Roman World*. London: Routledge.
- Papageorgiou-Venetas, A. 1981. *Délos. Recherches Urbaines sur une Ville Antique*. Berlin: Deutscher Kunstverlag.
- Pâris, J. 1916. "Contributions à l'Etude des Ports Antiques du Monde Grec. II Les Etablissements Maritimes de Délos." *BCH* 40: 5–73.
- Pirson, F. 1997. "Rented Accommodation at Pompeii: The *Insula Arriana Polliana* VI 6." In R. Laurence and A. Wallace-Hardill (eds.), *Domestic Space in the Roman World: Pompeii and Beyond*, *JRA Suppl.* 2, 165–81. Portsmouth, Rhode Island: Journal of Roman Archaeology.
- Pirson, F. 1999. *Mietwohnungen in Pompeji und Herkulaneum: Untersuchungen zur Architektur, zum Wohnen und zur Sozial- und Wirtschaftsgeschichte der Vesuvstädte*, Studien zur antiken Stadt 5. Munich: Friedrich Pfeil.
- Purcell, N. 1996. "The Ports of Rome." In A. Claridge and A. Gallina Zevi (eds.), *'Roman Ostia' Revisited: Archaeological and Historical Papers in Memory of Russell Meiggs*, 267–79. London: British School at Rome.

- Rauh, N.K. 1992. "Was the Agora of the Italians an Établissement De Sport?" *BCH* 116: 293–333.
- Rauh, N.K. 1993. *The Sacred Bonds of Commerce: Religion, Economy, and Trade Society at Hellenistic Roman Delos, 166–87 B.C.* Amsterdam: J.C. Gieben.
- Reger, G. 1994. *Regionalism and Change in the Economy of Independent Delos, 314–167 B.C.* Berkeley, CA: University of California Press.
- Reger, G. 2004. "Delos." In M.H. Hansen and T.H. Nielsen (eds.), *An Inventory of Archaic and Classical Poleis*, 738–40. Oxford and New York: Oxford University Press.
- Roussel, P. 1908. "Les Athéniens Mentionnés dans les Inscriptions de Délos (Pl. IV) [Contribution à La Prosopographia Attica De J. Kirchner]." *BCH* 32: 303–444.
- Roussel, P. 1916, 1987. *Délos, Colonie Athénienne. Reimpression Augmentée de Compléments Bibliographiques et des Concordances Épigraphiques par Philippe Bruneau, Marie-Thérèse Couilloud-Le Dinahet, Roland Etenne.* Paris: de Boccard.
- Roussel, P. 1931. "La Population de Délos à la Fin du II^e Siècle avant J.-C." *BCH* 55: 438–49.
- Scranton, R.L. 1982. "Review of: *Délos. Recherches Urbaines sur une Ville Antique* by A. Papageorgiou-Venetas." *JSAH* 41: 55.
- Siebert, G. 1969. "'Délos', report in 'Chronique des Fouilles de L'École Française en 1968'" (G. Daux, ed.), *BCH* 93: 1031–44.
- Siebert, G. 1973. "Mobilier Délien en Bronze." In A. Plassart (ed.), *Études Déliennes, Publiées à l'Occasion du Centième Anniversaire du Début des Fouilles de l'École Française d'Athènes à Délos, BCH Suppl. 1*, 555–87. Paris: de Boccard.
- Siebert, G. 1975. "'Délos. Le Quartier De Skardhana', report in Travaux de l'École Française en 1974." *BCH* 99: 716–23.
- Siebert, G. 1976. "'Delos. Le Quartier de Skardhana', report in 'Chronique des Fouilles et Découvertes Archéologiques en Grèce En 1975.'" *BCH* 100: 799–821.
- Siebert, G. 1979. "Sur Deux Appliques de Lit Déliennes en Bronze." In C. Bérard (ed.), *Bronzes Hellénistiques et Romains, Tradition et Renouveau, Actes du Ve Colloque International sur les Bronzes Antiques, Lausanne, 8–13 Mai 1978, Cahiers d'archéologie romande* 17, 173–6. Lausanne: de Boccard.
- Siebert, G. 2001. *L'Îlot des Bijoux, L'Îlot des Bronzes, La Maison des Sceaux, Délos* 38. Athens and Paris: École française d'Athènes and de Boccard.
- Tang, B. 2005. *Delos, Carthage, Ampurias: The Housing of Three Mediterranean Trading Centres.* Rome: L'Erma di Bretschneider.
- Tréheux, J. 1952. "Études d'Épigraphie Délienne." *BCH* 76: 562–95.
- Tréheux, J. 1992. *Inscriptions de Délos, I. Les Étrangers, à l'Exclusion des Athéniens de la Clérouchie et des Romains.* Paris: de Boccard.
- Trümper, M. 1998. *Wohnen in Delos: Eine baugeschichtliche Untersuchung zum Wandel der Wohnkultur in hellenistischer Zeit.* Internationale Archäologie 46. Rahden: Verlag Marie Leidorf.
- Trümper, M. 2003. "Ein klassisches Haus in Delos? Zur Chronologie der Maison O in der Insula III des Quartier du Théâtre." *BCH* 127: 139–65.
- Trümper, M. 2005. "Modest Housing in Late Hellenistic Delos." In B.A. Ault and L.C. Nevett (eds.), *Ancient Greek Houses and Households: Chronological, Regional, and Social Diversity*, 119–39. Philadelphia: University of Pennsylvania Press.
- Trümper, M. 2007. "Differentiation in the Hellenistic Houses of Delos: The Question of Functional Areas." In R. Westgate, N. Fisher, and J. Whitley (eds.), *Building Communities: House, Settlement and Society in the Aegean and Beyond. Proceedings of a Conference Held at Cardiff University, 17–21 April 2001*, 323–34. London: The British School at Athens.
- Trümper, M. 2008. *Die 'Agora Des Italiens' in Delos: Baugeschichte, Architektur, Ausstattung und Funktion einer Späthellenistischen Porticus-Anlage.* Internationale Archäologie 104. Rahden: Verlag Marie Leidorf.

- Trümper, M. 2009. *Graeco-Roman Slave Markets: Fact or Fiction*. Oxford and Oakville, CT: Oxbow Books.
- Trümper, M. 2010. "Η Κατοικία στην Υστεροελληνιστική Δήλο (Houses in Late Hellenistic Delos)." *Αρχαιολογία και Τέχνες (Archaeology and the Arts)* 114: 16–27.
- Trümper, M. 2002. "Das Quartier du Théâtre in Delos. Planung, Entwicklung und Parzellierung eines ‚gewachsenen‘ Stadtviertels hellenistischer Zeit." *AM* 117: 133–202.
- Vallois, R. 1923. *Le Portique de Philippe, Délos* 7. Paris: de Boccard.
- Viedebanтт, O. 1916. "Der Athenische Volksbeschluss über Mass und Gewicht." *Hermes* 51: 120–44.
- Weber, M. 1958. *The City* (D. Martindale and G. Neuwirth, trans.). New York and London: Free Press.
- Zalesskij, N.N. 1982. "Les Romains à Delos (de l'histoire du Capital Commercial et du Capital Usuraire Romain)." In F. Coarelli, D. Musti, and H. Solin (eds.), *Delo e l'Italia, OpFin* 2, 21–49. Rome: Bardi Editore.
- Zarmakoupi, M. 2013a. "The City of Late Hellenistic Delos and the Integration of Economic Activities in the Domestic Sphere." *CHS Research Bulletin* 1, no. 2. <http://wp.chs.harvard.edu/chs-fellows/2013/10/25/the-city-of-late-hellenistic-delos/>
- Zarmakoupi, M. 2013b. "The Quartier Du Stade on Late Hellenistic Delos: A Case Study of Rapid Urbanisation (Fieldwork Seasons 2009–2010)." *ISAW Papers* 6. <http://dlib.nyu.edu/awdl/isaw/isaw-papers/6>
- Zarmakoupi, M. 2015a. "Les Maisons des Négociants Italiens à Délos: Structuration de l'Espace Domestique dans une Société en Mouvement." *Cahiers "Mondes anciens."* 7. <http://mondesanciens.revues.org/1588>, doi:10.4000/mondesanciens.1588
- Zarmakoupi, M. 2015b. "Hellenistic & Roman Delos: The City & Its Emporion." *Archaeological Reports* 61: 115–32. doi:10.1017/S0570608415000125
- Zarmakoupi, M. 2015c. "Die Hafenstadt Delos." In F. Pirson, S. Ladstätter, and T. Schmidt (eds.), *Häfen und Hafenstädte im östlichen Mittelmeerraum von der Antike bis in byzantinische Zeit. Aktuelle Entdeckungen und neue Forschungsansätze*, Byzas 14. Istanbul: Deutsches Archäologisches Institut.
- Zarmakoupi, M., and M. Athanasoula. 2018. "Υποβρύχια αρχαιολογική έρευνα στη βορειοανατολική πλευρά της Δήλου (Συνοικία του Σταδίου)" [Underwater Archaeological Investigation of the Northeast Side of Delos (Stadion District)]. In A. Simosi and S. Sotiriou (eds.), *Proceedings From "Βουτιά στα περασμένα: Η υποβρύχια αρχαιολογική έρευνα, 1976–2014"* [Diving in the Past: The Underwater Archaeological Research, 1976–2014]. Conference of the Ephorate of Underwater Antiquities, 93–104. The Acropolis Museum, Athens, March 6, 2015.

4 The collective image of a city

Structure and meaning of Hellenistic agorai*

Barbara Sielhorst

Introduction

The agora, as the heart of the ancient polis within the Mediterranean world, has been the focus of scientific research for several decades.¹ In many handbooks of urban design and architecture the agora as a multi-functional square is the starting point of the development of public meeting places within Western civilization.² Interestingly, however, the archaeological research offers a wide range of observations of single agorai but rather seldom broader-based, comparative studies.³ As a result of an increasing interest in public space in the humanities since the 1970s there has been a significant increase in interest in agorai-related research.⁴ As a first result, several studies on agorai were finished recently. This research deals with agorai in different ways: Sometimes a specific agora serves as a starting-point for comparative studies with other agorai in a certain region;⁵ in other instances the best-preserved agorai offer inside-views into the social hierarchies of the poleis;⁶ and sometimes a general overview of agorai enables an interpretation of these places as a mirror for the society which used and built them.⁷

The biggest change in the appearance of agorai took place during the Hellenistic period between the reign of Alexander the Great and that of Augustus.⁸ At this time large territorial states under royal control emerged whilst at the same time poleis with their institutions and their structural appearance showed great vitality.⁹ The key inquiry of this present contribution is the degree to which characteristic features and changes in the appearance of Hellenistic agorai can be observed. It also asks how these conditions provide information about the societies which shaped and used agorai.

Usually the Hellenistic Age is precisely defined chronologically (336–30 BC). In order to observe the characteristic changes in the composition of agorai most clearly I decided to commence my analysis around 400 BC and to close in the early imperial period (around 50 AD). This focus makes it easier to determine relevant changes in the form of agorai. Furthermore, a geographical limitation to mainland Greece, the Aegean Islands and western Asia Minor seemed to be reasonable since these regions constitute the centre of the Hellenistic world.

The theoretical background of this study is a relational concept of space that offers the possibility to determine the informational value of the examined squares in view of the society.¹⁰ In order to make relevant statements about the society which built and used a specific agora, the methodological approach operates on the premise of a reciprocity between the people and the built environment.¹¹

Characteristic features of Hellenistic agorai

In order to exemplify which role Hellenistic agorai had within the urban appearance and self-perception of a polis, well-preserved examples, which reveal the characteristics of these squares in a paradigmatic way, should be analyzed more closely. Like the zoom function of a camera, the analysis starts from a great height with the position of the agora within the city and leads up to a close-up of the spatial and semantic relations of single statues.

The place within the city: formation and access

The form of the agora underwent many changes from the Archaic to Roman times. From its beginning as a stone circle in Archaic times the agora became an architecturally framed place in the centre of a city.¹² Common building types like bouleuteria, prytaneia and notably stoai were already developed in late Archaic and Classical times and quickly became the standard equipment of such a place. Concerning the position of an agora within a city it can be said that it is placed at the infrastructural centre. This neither means that an agora lies necessarily in the geographical centre nor that it is always crossed by the main street. The concrete solution as to how an agora is formed depends on the individual layout of each city. The comparison of 'grown' cities like Athens and newly founded ones like Priene helps to clarify general tendencies, as new developments of the Hellenistic era became clearly recognizable (see Figure 4.1). While the agora of Athens is crossed by the main street, the Panathenaic Way, the main street of Priene is part of an orthogonal street system and runs parallel to the north stoa and passes through the agora on one side. A new development since the end of the fourth and the beginning of the third century BC is the exclusion or relocation of the main streets, which can be observed also in the cases of the agorai of Thasos, Kassope, Megalopolis and Miletus. In addition to this, the increasing use of an orthogonal street system forced every building and thus the agora into a more

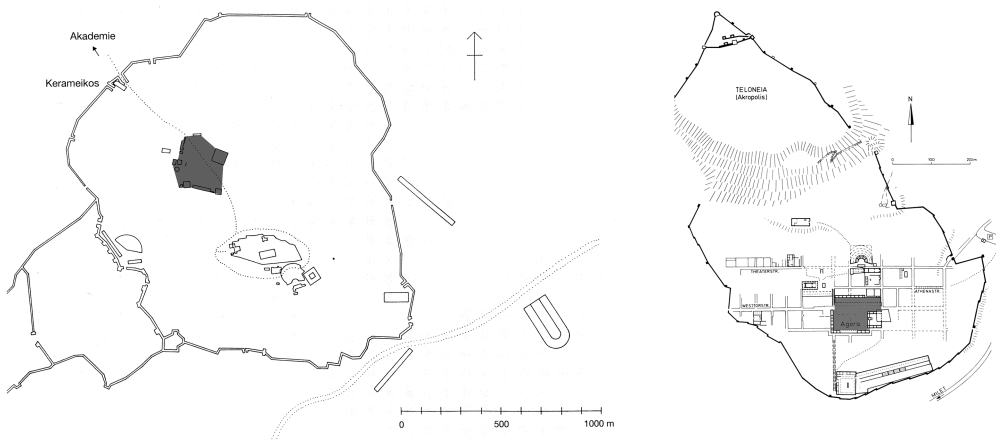


Figure 4.1 Athens (left) and Priene (right) with their agorai highlighted in grey

or less rectangular form. Agorai were like parts of a “puzzle” within a dominant city layout.

Agorai within the urban grid were often framed in a compact and uniform way. As the formation of the city centre of Miletus (see Figure 4.2) shows, different squares arose by the increasing use of stoai. In this way two larger public places and four adjacent peristyles were separated from their urban environment and became architecturally independent parts of the city. The general striving for monumentality in agorai can already be observed during the fourth century BC and at this time also in other urban public places such as sanctuaries and gymnasia.¹³ In their general layout, these places, surrounded by stoai, became more standardised. However, their various and different specific functions gave rise to the development of individual features which, while keeping with the general layout, gave each agora its own particular appearance.

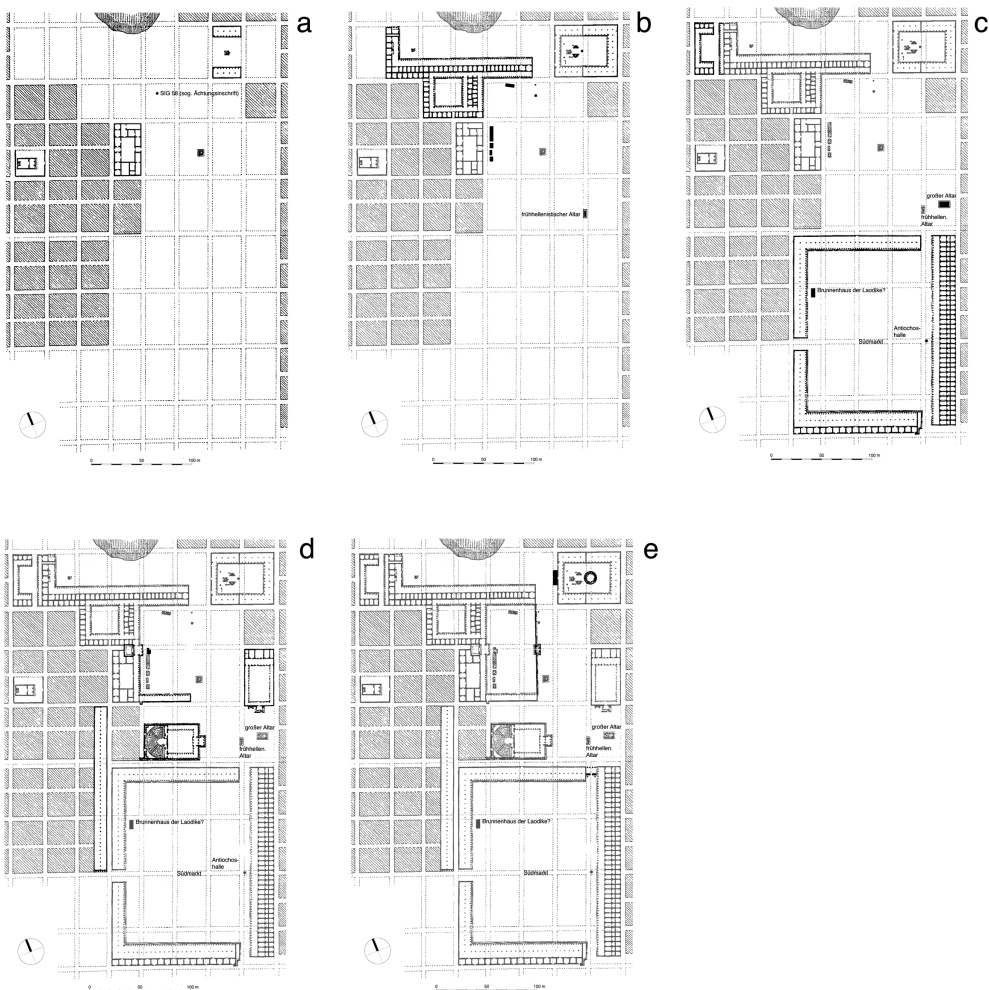


Figure 4.2 The development of the agora of Miletus from around 400 BC until the first century AD

Another new phenomenon of that era is the greater influence of aesthetic aspects on the disposition of an agora. Hellenistic agorai, for example, can be situated at the periphery of the cities in order to offer a beautiful prospect into the landscape. This view can be emphasised by a simple balustrade like the one at the agora of Kassope (see Figure 4.3) or with the help of multistoried stoai, as for example the south stoa at the agora of Assos (see Figure 4.4).

By increasing use of stoai and thus giving agorai a compact shape, a new approach in city planning can be observed. For the first time agorai become independent in their urban context because they were framed squares within the cities and thus open to a new design. One of the results of this new approach can be identified with the creation of prospects. They exemplify the new ideas in the field of urban development which show a clear tendency to more visually perceptible aesthetics.¹⁴

The diversification of the square space: function and meaning

The new and compact formation of agorai goes hand in hand with a functional diversification of the square itself. First of all, the framing of agorai with stoai offered space for different functions at the edges of the squares. These multifunctional buildings could be used for mercantile, political and social functions as well.¹⁵ At the same time the appearance of stoai with their columned front sides established a unified “curtain” behind which the different functions disappeared from the square space. Furthermore, there are special building types like bouleuteria and prytaneia, which can be associated with a specific function. In contrast to examples of agorai from earlier periods, in Hellenistic times these buildings no longer tended to be placed directly at the edge of an agora but rather were frequently situated behind a stoa.¹⁶ The new distance between these political buildings and the agora signalled a change in the use of the central place

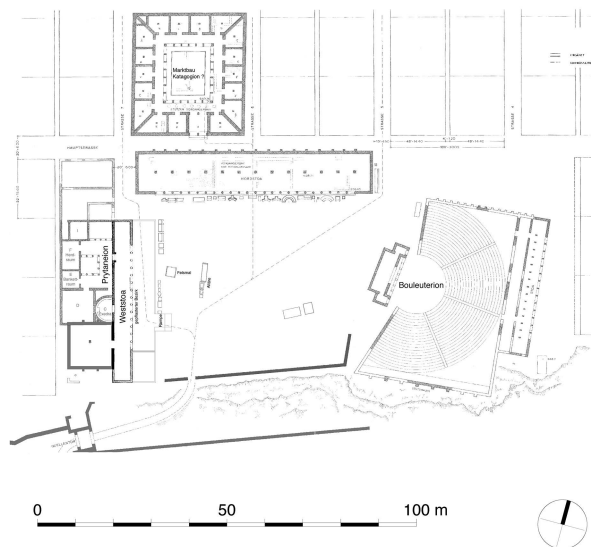


Figure 4.3 The agora of Kassope with the south balustrade for a panoramic view into the landscape

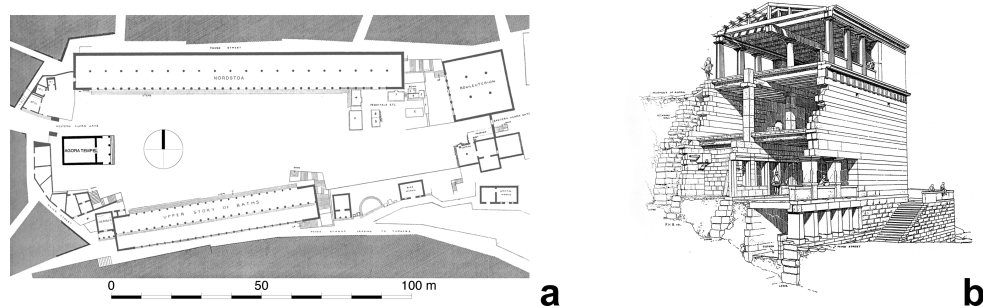


Figure 4.4 The agora of Assos (a) with a reconstruction of the multistoried south stoa (b)

of a city. We know from epigraphical sources that even in Hellenistic times the institutions of political self-determination were still of great importance for a polis.¹⁷ In contrast to this, the architectural analysis of an agora leads to the conclusion that the surrounding stoi pushed the rooms and buildings which housed the political functions into the background. As the agorai of Termessos and Thasos exemplify, even the entrances to the bouleuteria and prytaneia are sometimes facing away from the agora (see Figure 4.5). In this way the political buildings were cut off from a direct approach to the square and subsequently the activities which usually took place inside them lost their relevance with the square itself. The relocation of these two building types, which once were central parts of each agora, offered space for new uses of the square itself. Another development concerning the functions of agorai is the fact that mercantile rooms were separated from the agorai even more. As the agora of Thasos shows, the stoa at the southeast side offered rooms for mercantile functions that were explicitly orientated to the street outside the agora. Sometimes a second square is situated directly next to the agora (for example at Priene) or an independent one exists at another part of the city (for example at Pergamum, see Figure 4.6). In contrast to the separation of political and mercantile functions from the agora the sacral function showed a much greater presence and continuity. There are often several smaller cult places positioned within an agora, as can be seen at Corinth, for example.¹⁸ Temples are seldom positioned within agorai, although examples do exist at Messene, Magnesia a. M. and Thasos. If there are temples they are not situated at the centre and do not dominate the square as it was typically reserved for sanctuaries or for buildings erected for the cult of the Roman Emperor in later times. The cult places for local heroes or city founders play a more important role although archaeological evidence has been found only for a few of them. So far we know only two cult places for the city founders, namely at the agorai of Kyrene and Thasos. A characteristic feature for such a place is that it was rebuilt time and again over the centuries and was clearly of great importance for the people who used the agora. In contrast to the relocation of political and mercantile buildings away from agorai, an increase in use of statues can be observed. Although they can be found within agorai in the Pre-Hellenistic period there is a shift in their presence from the second century BC onwards. Among them is a surprisingly small number of statues which represent Hellenistic kings.¹⁹ A great majority of statues were set up on agorai to honour important local people. A special example are the statues at the agora of Priene which were rearranged after a devastating fire around 140/30 BC and consist mainly of statue groups for local influential families (see Figure 4.7).

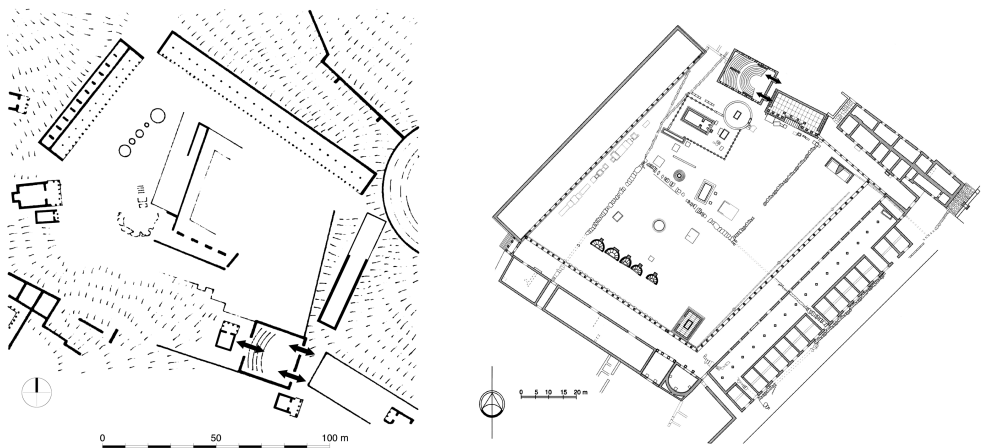


Figure 4.5 The agorai of Termessos (left) and Thasos (right) with arrows indicating the entrances of their bouleuteria



Figure 4.6 A city map of Pergamum with the upper and lower agora highlighted in grey

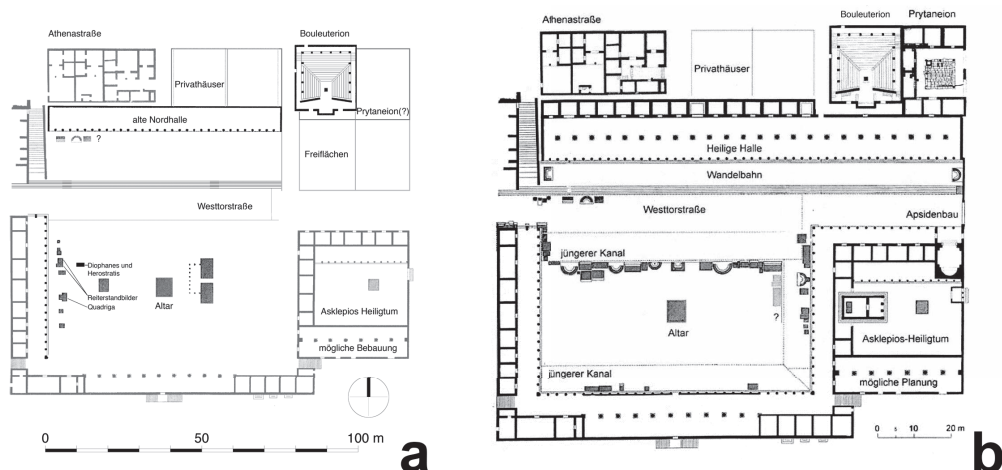


Figure 4.7 The agora of Priene (a) before (third century BC) and (b) after (around 140/30 BC) the rearrangement of statues

The Hellenistic agorai became architecturally unified public places that were more and more relieved from their former functions. In particular, the increasing use of framing stoai leads to the separation of different areas. While political and mercantile functions are situated at the edge or even outside the agora, in general sacred precincts can still be found on agorai themselves. Within this development two divergent tendencies can be observed: First, the uniform shape of the agorai at their peripheries supported the general separation of functions; secondly, at the same time, the monotonous facades of the omnipresent stoai implied a sense of visual unity that masked functional diversification. The unified facades of the stoai stood in sharp contrast to the functional diversification of the rooms at the rear. This contradiction caused by the built environment is, in my opinion, a significant feature of Hellenistic agorai in general.

The changing perception of the square

Agorai which are surrounded by stoai on all sides illustrate the greatest spatial unity. This group includes peristyle-like agorai such as the one in Pella or the lower agora of Ephesus (see Figure 4.8). The changes described earlier in the outer appearance and the relocation of functions went hand in hand with a new formation of the inner square and changed the reception of the agora by the ancient observer. Standing on the square the visual differentiation of functions situated inside the surrounding buildings became quite difficult. This demonstrates that their functions were irrelevant for the character of the agora square itself. In their place honorific statues dominated the public space and their increasing number shows that they became more and more important. The representation of influential persons became the dominant function of agorai in Hellenistic times. Most commonly the statues were set up in ‘egalitarian’ lines in front of buildings and alongside streets so that the observer’s reception is turned to the facades, which serve as a kind of scenic backdrop for the monuments in front. In this way, the

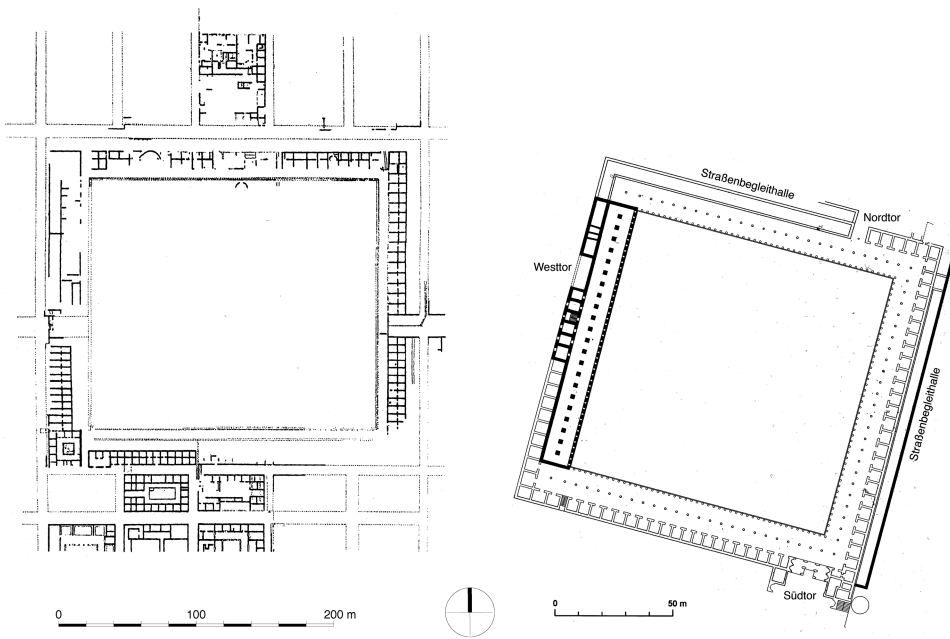
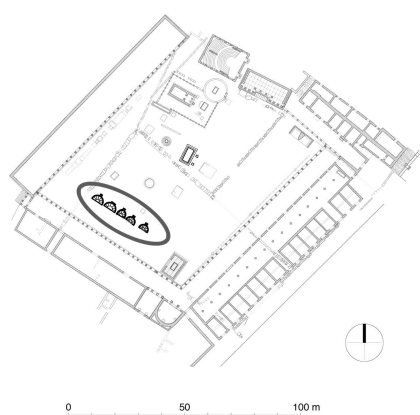


Figure 4.8 Two peristyle-like agorai. The agora of Pella (left) and the lower agora of Ephesus (right)

original intention of honoring a single person was lost in favour of the representation of a group of honoured persons. It is important here to mention another similar way of presenting statues of dignitaries: the use of statues bases in the form of exedras. These offer an ideal pedestal for genealogical statue groups that in most cases represent local families. A very prominent example in this context is the line of exedras at the agora of Thasos, which flanked a kind of processional way leading from the entrance in the west to the large altar in the south corner (see Figure 4.9). Between the first century BC and the first century AD five exedras were erected in order to flank the way to the cult place. Epigraphical evidence demonstrates that at least one of the exedras was used in order to honour members of a local family.²⁰ In addition, this type of statue base served also as a bench and provided, from time to time, a double presence of the honoured persons and their living family members.²¹ Another effect of these rows of statues, the facades of the buildings along the periphery, and the streets nearby is that all had a guiding effect on the movements of the ancient visitor to an agora. Furthermore, the entrances to the square are marked by the surrounding buildings and offer a spotlighted perception of the square and its monuments. Although they are seldom marked by buildings, like an archway in a corner of the agora of Athens, they force the ancient observer to a predetermined first perception of the agora. Another example for a guided perception of an agora is the south entrance in the middle of the south stoa at the agora of Messene (see Figure 4.10). Entering the square through this entrance leads the view of the observer directly to the space between the temple of the city goddess Messene



a



b

Figure 4.9 Ground plan (a) and reconstruction (b) of the processional way defined by a row of exedras at the agora of Thasos

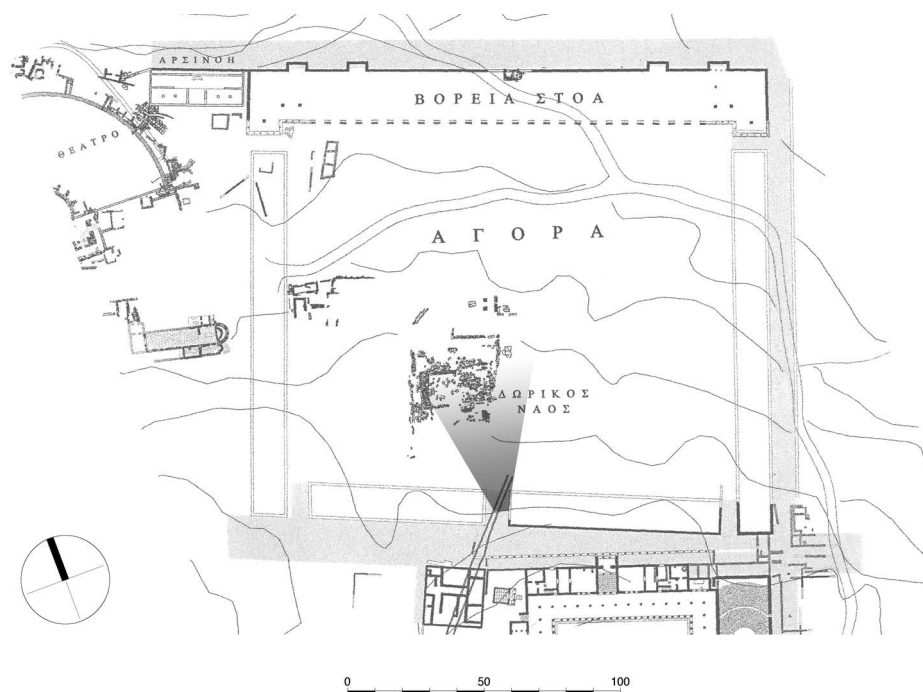


Figure 4.10 The view from the south entrance of the agora of Messene to the temple of the city goddess Messene on the square

at the agora of Athens²⁹ and the statues of Gaius and Lucius Caesar at the agora of Thasos.³⁰

The new density of agorai and its meaning

This analysis can go one step further in dealing with the semantics of Hellenistic agorai: On the premise that material finds can be interpreted as signs or symbols, it is possible to 'read' the architecture and monuments of the agorai as remains of a lost society which bear a certain meaning. Beginning on a large scale, the setting of an agora and the sometimes staged visual connection with the urban or rural surroundings create a semantically loaded relation between the free place in the built-up city centre and the polis and its chora.³¹ These formal and functional different parts of a polis are visually connected and are brought into an exciting dialogue. The agora represents the social centre of the community and this depends fundamentally on a profitable chora. Similar divergent meanings can be found in the architecture of agorai as well. Buildings like stoai, propyla and stairways transmit divergent messages: On the one hand they somehow limit or separate areas; on the other hand they connect them with each other and facilitate access to another area.³² Two prominent examples for the connection of interior and exterior are the stoai with projecting wings and the statue bases shaped as exedras.³³ Both of them cut out a certain part of the square and use it for presenting honorific statues. As the example of the Stoa of Zeus at the west side of the agora of Athens demonstrates, the statues in front of it are connected not only by their shared place of installation but also by their same textual meaning. Next to the central statue of "Zeus the Liberator" were set up statues of successful generals like Konon (393 BC), Euagoras (393 BC) and Timotheos.³⁴ All together they transmit the key terms of military victory and freedom of the polis.³⁵ By extending our view to include the statues located further to the south, the different messages conveyed by statues and buildings on the agora become even more interesting. In front of the Metroon-Bouleuterion complex we find statues for the Eponymous Heroes of the polis, the statue of Eirene and Ploutos and statues of several persons who were honoured because of their benefactions to the city (see Figure 4.12). All together they transmit the slogans such as freedom, prosperity and benefaction.³⁶ It must also be said that these statue groups are among the best preserved from the Hellenistic period insofar as they give an impression of the semantic density and the intellectual quality of agorai at that time. Another phenomenon is the increasing use of personifications. The above mentioned statues of Eirene and Ploutos are not the only examples of this kind of situation. We have remains of a naval victory monument in the agora of Thasos and a statue of the *Populus Romanus* in the agora of Kaunos. These statues reflect a tendency to commemorate a special event while using a formal representation that embodies a timeless statement, which could still be understood even if the particular occasion for the erection of the monument was already forgotten. Another type of monument that refers to an event in the past and offers a meaning for the present or even future is the grave or cenotaph of the city founder.³⁷ The grave for one of the city founders of Thasos can be found in the agora and offers a retrospective as well as a prospective message.³⁸ Telesikles was an important figure in the history of the polis and thus an important point of reference for the present and future. The statue changed its appearance over time but clearly kept its relevance for the polis. More than any other monument type, the one of a city founder may be part of the collective memory and identity of the citizens because it refers to the very beginning of the polis' history.

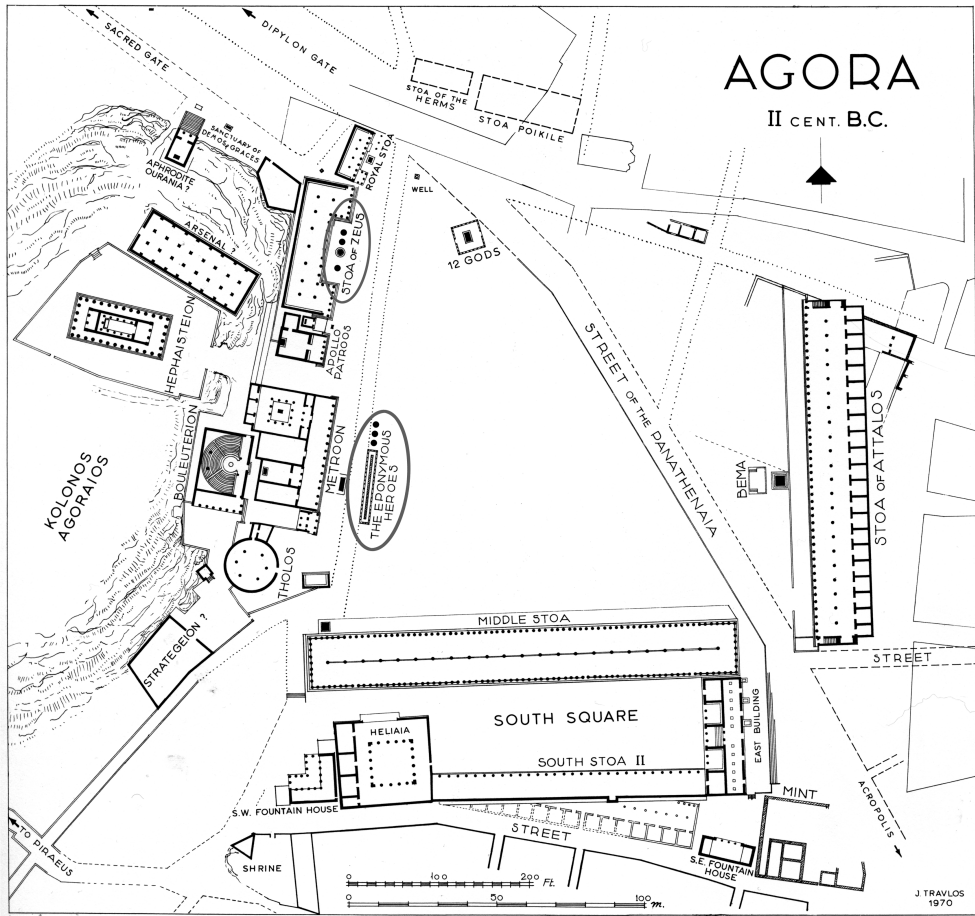


Figure 4.12 The agora of Athens with highlighted semantic groups in front of the Stoa of Zeus and in front of the Metroon-Bouleuterion complex

These examples should demonstrate that the semantics of Hellenistic agorai can be found in a wide range of media and in different places. They include the setting of an agora and its environment, the architecture, and also single monuments that were placed on the square. Although every polis had its unique agora there is a tendency concerning the layout of the squares in general which supports their spotlighted perception. The framing of the agorai and the grouping together of statues with similar meanings facilitate a quick orientation of a place without neglecting the intellectual demand of a single monument. Another characteristic which Hellenistic agorai have in common is the preference for divergent tendencies within their spatial and architectural design. This is clear not only from an analysis of the architecture, which at the same time unifies and separates, but also from a closer look at the monuments, which are intentionally set up to honour a single person and can usually be received as part of a group. After a period of time when a single king dominated the political scene it was obviously more important to be part of a powerful group and to be part of a long tradition than to represent

oneself in an agora as an absolute ruler. Furthermore, the increasing number of buildings and monuments led to previously unknown architectural and semantic densities in agorai which offered a wide number of statements for the ancient visitor.

Summary

Reflecting upon all aspects which can be observed in the formation of Hellenistic agorai, the question arises: what do these things tell us about the societies which built and used these places? Based on a rational concept of space and the sociology of architecture, a reciprocity between the built environment and the people living in it can be taken for granted.

But before formulating some thesis about former societies, the main characteristic features in the formation of Hellenistic agorai should be summarised. Despite a significant heterogeneity among them it can be said that as in previous eras, agorai in the Hellenistic period are mostly constructed on even ground and with a good infrastructure. A new feature is the building of agorai on hillsides and using topographical situations in a clever way to ensure a prospects into the surroundings and/or onto the square. Secondly, agorai became architecturally framed squares and compact subspaces within the cities. The framing of agorai and the fusion of the building facades began already in the fourth and third centuries BC and were intensified in the second century BC. This situation created a compact and homogeneous appearance of agorai. This in turn led to a clearer differentiation of the squares themselves. Also, from the second century BC onwards the number of monuments on agorai increased and they frequently constituted semantic groups. The new density of buildings, their uniform facades and the increasing number of monuments set up in 'egalitarian' lines led to a stronger control of the activities taking place on a given agora and permitted a spotlighted perception of the complex. As the political and mercantile functions of agorai were pushed into the background, the new focus rested on the representation of local elites and the formation of a collective identity.

As a result of these changes, agorai served as the most important public places for urban self-perception and the perception of others. This contrasts strongly with the old prejudice that Hellenistic agorai lost their political functions and became a 'museum' for Classical sculptures and representative buildings.³⁹ This fits well with the results of ancient historians who showed in several detailed analyses that the political institutions of Hellenistic poleis were still powerful and vital.⁴⁰ In addition to the results of these studies the analysis of the archaeological evidence shows that agorai gave an impression of the individual communities they served. The drive behind setting up a statue was the agonistic relationship between different local groups that were both influential and constantly striving for power. Nevertheless, the increasing number of statues and the final appearance of agorai show a different outcome: Influenced by the decision-making political councils, the image of the individual subordinated itself to a group and its textual meaning. This goes hand in hand with a guiding effect of the layout of each agora and the spotlighted perception of the squares, which favoured the reception of overlapping messages that several monuments had in common. As a result, Hellenistic agorai were the favoured public places for the permanent representation of the local elites. They were also ideal sites for foreigners to witness the local hierarchies of the polis. The formulated social standards and values worked as a collective model for the society.

Finally, a last note should point out a general tendency in the formation and meaning of agorai as part of the mentality of Hellenistic times. The high number of divergent tendencies in the formation and perception of agorai demonstrate a general disposition of the period. It has parallels in the ancient sculpture and in the historiography of that time. Adolf. H. Borbein had already pointed out that the sculptures of the fourth century BC can be characterised by the key words “distance” and “reflection”.⁴¹ Similar characteristics can be observed within Hellenistic agorai as well. The arrangement of the monuments on the squares in front of unified facades and the tendency to build semantic statue groups encourage a perception from a certain distance without negotiating the intellectual demand of each single monument. Furthermore, the historian Angelos Chaniotis came to similar results concerning local historiography.⁴² He characterises the Hellenistic era as a time which was shaped by antitheses. As examples of this concept, he mentions pairs of opposites such as cosmopolitanism versus local patriotism, world empire versus unanimity of the polis, esotericism versus rationalism, and enlightenment versus mysticism, to which he adds the pair opposites of universal versus local history.

Despite the general tendency of divergent phenomena within the Hellenistic mentality it can be said that at a time when first large scale communities with Hellenistic rulers existed, and later when the Roman Empire emerged, the main functions of an agora were to create a collective image of the city and to be an essential and permanent part of the specific polis-identity.⁴³

Notes

* I would like to thank Samantha Martin-Mcauliffe and Daniel Millette for inviting me to contribute to this volume. Furthermore I would like to thank Marie Drauschke for translating my text into English and the editors of this book for revising the manuscript once again. The text is based on an article which arose out of a conference held at Kos in April 2011. Its content has been revised, enlarged and modified for the subject of this book.

- 1 The beginning of scientific research about Hellenistic agorai marks the publication of Ernst Curtius from 1848 (Curtius 1848).
- 2 For example Sitte 1889; Zucker 1959; Webb 1990, 28 f.
- 3 The last large-scale study of agorai is the handbook from Roland Martin from 1951 (Martin 1951).
- 4 Basic literature about the beginning of the ‘spatial turn’ in the humanities since the 1970s and its way into classical archaeology includes: Eco 1972; Lefebvre 2005; Rapoport 1982; Gregory 1985; Parker Pearson and Richards 1994; Hoepfner and Zimmer 1993; Maran u. a. 2006. – About the renewed interest in agorai: Hoepfner and Lehmann 2006.
- 5 Dubbini 2009; Donati 2010.
- 6 Dickenson 2012.
- 7 Sielhorst 2015.
- 8 Usually, the Hellenistic Age is clearly defined (336–30 BC) (Gehrke 2008). In order to observe the characteristic changes in the composition of agorai most clearly I decided to start my analysis around 400 BC and to close it in the early Roman imperial period.
- 9 About the political vitality during the age of Hellenism: Gehrke 2003; Hamon 2009; Fröhlich and Müller 2005.
- 10 About the relational concept of space see Löw 2005.
- 11 Basic literature for the theoretical approach of this study includes: Lefebvre 2005; Rapoport 1982; Maran 2006.
- 12 Kolb 1996.
- 13 von Hesberg 1981, 115 f.; Ehrhardt 2009 (sanctuaries) – Wacker 2009; von den Hoff 2009b (gymnasia).

- 14 For the increasing use of aesthetics in the Hellenistic era, see: Onians 1979; Lauter 1986; Fowler 1989; Butz 2009.
- 15 Coulton 1976; Lauter 1986.
- 16 Sielhorst 2015, 29 f.
- 17 Some literature which gives an overview about the on-going discussion about the influence of the political institutions and local elites in Hellenistic poleis includes: Quaß 1993; Müller 1995; Fröhlich 2004; Hamon 2009.
- 18 Dubbini 2011.
- 19 Dickenson 2013.
- 20 Dunant and Roux 1953, 272–6; Roux 1955, 351 f.; Dunant and Pouilloux 1958, 170, 172.
- 21 Thüngen 1994; von Kienlin 2004.
- 22 Dickenson 2013.
- 23 For the stoa of Attalos at the agora of Athens and the honorific monument for Attalos II placed in front of the stoa see Diod. 20, 46, 2; Thompson and Wycherley 1972, 107 Fig. 28.
- 24 Raeck 1995.
- 25 Işık 1994.
- 26 See the map in the publication from Heide Lauter-Bufe (Lauter-Bufe 2009, Pl. 87).
- 27 For the two layers of perception see Bauer 1996.
- 28 Regarding the formation of the agorai at their beginnings, see: Martin 1951; Kolb 1981, 1996; Kenzler 1999.
- 29 The first statue group of the Tyrannicides on the agora of Athens was set up around 510 BC (Stemmer 1995, 300–4).
- 30 The statues of Gaius und Lucius at the agora of Thasos were set up in Augustan times (Grandjean u. a. 2000, 72, Fig. 21 [no. 30]).
- 31 Concerning the opposition of polis and chora see Alcock 1993; Schuler 2007; Mileta 2008, 127 f.
- 32 Lauter 1986, 205. 301.
- 33 Lauter 1982, 119–21, 719–24; Onians 1979, 158–60.
- 34 Krumeich 1995, 207 f. Anm. 2.3.
- 35 von den Hoff 2009a.
- 36 von den Hoff 2007.
- 37 Fabricius 2010.
- 38 Grandjean u. a. 2000, 76 Fig. 21 (Nr. 35).
- 39 Schalles 1982; Kolb 1996, 273; Hoepfner – Lehmann 2006; 23–8.
- 40 Concerning the thesis of a “museumization” of Hellenistic agorai see most recently Hoepfner and Lehmann 2006, 23–6. An overview of the recently published literature about the political institutions of Hellenistic poleis is provided by Fröhlich and Müller 2005; Hamon 2009.
- 41 Borbein 1973, 184–8.
- 42 Chaniotis 1988, 133–9.
- 43 Concerning the formation of specific polis-identities see Fabricius 1999, 341; Fabricius 2010, 282–4.

Bibliography

- Alcock, S.E. *Graecia Capta: The Landscapes of Roman Greece* (Cambridge 1993).
- Bauer, F.A. *Stadt, Platz und Denkmal in der Spätantike: Untersuchungen zur Ausstattung des öffentlichen Raums in den spätantiken Städten Rom, Konstantinopel und Ephesos* (Mainz 1996).
- Borbein, A.H. “Die griechische Statue des 4. Jahrhunderts v. Chr.” *JdI* 88, 1973, 43–212.
- Butz, P.A. “Inscription as Ornament in Greek Architecture.” In P. Schultz and R. von den Hoff (eds.), *Structure, Image, Ornament: Architectural Sculpture in the Greek World* (Oxford 2009) 30–9.
- Chaniotis, A. *Historie und Historiker in den griechischen Inschriften: Epigraphische Beiträge zur griechischen Historiographie, Heidelberger althistorische Beiträge und epigraphische Studien* 4 (Stuttgart 1988).

- Coulton, J.J. *The Architectural Development of the Greek Stoa*, Oxford Monographs on Classical Archaeology (Oxford 1976).
- Curtius, E. "Ueber die Märkte hellenistischer Städte." *AZ* 1848. 292–6.
- Dickenson, C.P. *On the Agora: Power and Public Space in Hellenistic and Roman Greece* (Diss. Universität Groningen 2012).
- Dickenson, C.P. "Kings, Cities and Marketplaces – Negotiating Power Through Public Space in the Hellenistic World." In O. Van Nijf (ed.), *Public Space in the Post-Classical City*, *Kolloquium Fransum* 23. Juli 2007 (Leuven 2013) 37–77.
- Donati, J.C. *Towards an Agora: The Spatial and Architectural Development of Greek Commercial and Civic Space in the Peloponnese* (Diss. New York University 2010).
- Dubbini, R. *Die Kulte der Agorai in den Städten der Peloponnes* (Diss., Ruprecht-Karls-Universität Heidelberg – Università degli Studi di Roma "La Sapienza" 2009).
- Dubbini, R. "Die Kulttopographie von Korinth. Probleme, Methode und Ergebnisse einer Rekonstruktionshypothese." In C. Rödel and C. Waschke (eds.), *Orte des Geschehens. Interaktionsräume als konstitutive Elemente der antiken Stadt*, *Kolloquium Heidelberg* 26 Februar–1 März 2009 (Münster 2011).
- Dunant, C., and J. Pouilloux. "L'agora." *Études thassiennes* 6, 1958, 93–9.
- Dunant, C., and G. Roux. "Chronique des fouilles en 1952, Thasos, Agora." *BCH* 77, 1953, 272–6.
- Eco, U. *Einführung in die Semiotik, Uni-Taschenbücher 105* (München 1972).
- Ehrhardt, W. "Hellenistische Heiligtümer und Riten: Die westlichen Sakralbezirke in Knidos als Fallbeispiel." In A. Matthaei and M. Zimmermann (eds.), *Stadtbilder im Hellenismus, Die hellenistische Polis als Lebensform* 1 (Berlin 2009) 93–115.
- Fabricius, J. *Die hellenistischen Totenmahlreliefs: Grabrepräsentation und Wertvorstellungen in ostgriechischen Städten, Studien zur antiken Stadt* 3 (München 1999).
- Fabricius, J. "Zwischen Konvention und Tabu. Zum Umgang mit Heroenkulten in hellenistischen Poleis." In M. Meyer and R. von den Hoff (eds.), *Helden wie sie. Übermensch – Vorbild – Kultfigur*, *Kolloquium Wien* 2.–4. Februar 2007, *Paradeigmata* 13 (Freiburg i. Br 2010) 257–93.
- Fowler, B.H. *The Hellenistic Aesthetic* (Madison, WI 1989).
- Fröhlich, P. *Les cités grecques et le contrôle des magistrats (IVe – 1er siècle avant J.-C.)*, *Hautes études du monde gréco-romain* 33 (Genève 2004).
- Fröhlich, P., and C. Müller (eds.) *Citoyenneté et participation à la basse époque hellénistique*, *Paris* 22. – 23. Mai 2004, *Hautes études du monde gréco-romain* (Genève 2005).
- Gehrke, H.-J. "Bürgerliches Selbstverständnis und Polisidentität im Hellenismus." In K.-J. Hölkeskamp, J. Rüsen, and E. Stein-Hölkeskamp (eds.), *Sinn (in) der Antike. Orientierungssysteme. Leitbilder und Wertkonzepte im Altertum* (Mainz 2003) 225–54.
- Gehrke, H.-J. *Geschichte des Hellenismus, Oldenbourg Grundriss der Geschichte* 1A 4 (München 2008).
- Grandjean, Y., F. Salviat, and F. Blondé (eds.) *Guide de Thasos, Sites et monuments* 3 (Paris 2000).
- Gregory, D. (ed.) *Social Relations and Spatial Structures. Critical Human Geography* (Houndsmills 1985).
- Hamon, P. "Démocraties grecques après Alexandre à propos de trois ouvrages récents." *Topoi* 16/2, 2009, 347–82.
- Hoepfner, W., and L. Lehmann. *Die griechische Agora*, *Kolloquium Berlin* 16. März 2003, *Schriften des Instituts für Klassische Archäologie der Freien Universität Berlin* (Mainz 2006).
- Hoepfner, W., and G. Zimmer. *Die griechische Polis: Architektur und Politik, Schriften des Seminars für Klassische Archäologie der Freien Universität Berlin* (Tübingen 1993).
- Işık, C. "Işık, Ein Pfeilermonument zu Ehren des Populus Romanus auf der Hafenağora von Kaunos." *Lykia* 1, 1994, 138–51.
- Kenzler, U. *Studien zur Entwicklung und Struktur der griechischen Agora in archaischer und klassischer Zeit*, *Europäische Hochschulschriften* 38, *Archäologie* 72 (Frankfurt a. M. 1999).
- Kolb, F. *Agora und Theater. Volks- und Festversammlung*, *AF* 9 (Berlin 1981).

- Kolb, F. DNP 1 267–74 s.v. Agora (1996).
- Krumeich, R. “Die Agora von Athen.” In K. Stemmer (ed.), *Standorte. Kontext und Funktion antiker Skulptur, Ausstellungskatalog Berlin*, 276–89. (Berlin 1995).
- Lauter, H. “Struktur statt Typus. Zu einem hellenistischen Architekturmotiv.” *AA* 1982/2, 703–24.
- Lauter, H. *Die Architektur des Hellenismus* (Darmstadt 1986).
- Lauter-Bufe, H. *Das Heiligtum des Zeus Soter in Megalopolis* (Mainz 2009).
- Lefebvre, H. *The Production of Space* (Malden, MA 2005).
- Löw, M. *Raumsoziologie, Suhrkamp Taschenbuch Wissenschaft 1506 4* (Frankfurt a. M. 2005)
- Maran, J. “Architecture, Power and Social Practice – An Introduction.” In J. Maran, C. Juwig, H. Schwengel, and U. Thaler (eds.), *Constructing Power – Architecture, Ideology and Social Practice = Konstruktion der Macht – Architektur, Ideologie und soziales Handeln, Geschichte, Forschung und Wissenschaft 19* (Münster 2006) 9–14.
- Maran, J., C. Juwig, H. Schwengel, and U. Thaler (eds.) *Constructing Power – Architecture, Ideology and Social Practice = Konstruktion der Macht – Architektur, Ideologie und soziales Handeln, Geschichte, Forschung und Wissenschaft 19* (Münster 2006).
- Martin, R. *Recherches sur l’agora Grecque. Études d’histoire et d’architecture urbaines*, BEFAR 174 (Paris 1951).
- Mileta, C. *Der König und sein Land. Untersuchungen zur Herrschaft der hellenistischen Monarchen über das königliche Gebiet Kleinasien und seine Bevölkerung* (Berlin 2008).
- Müller, H. “Bemerkungen zu Funktion und Bedeutung des Rates in den hellenistischen Städten.” In M. Wörrle and P. Zanker (eds.), *Stadtbild und Bürgerbild im Hellenismus, München 24.–26. Juni 1993* (München 1995) 41–54.
- Onians, J. *Art and Thought in the Hellenistic Age: The Greek World View, 350–50 BC* (London 1979).
- Parker Pearson, M., and C. Richards. *Architecture and Order: Approaches to Social Space, Material Cultures* (London 1994).
- Quaß, F. *Die Honoratiorenschicht in den Städten des griechischen Ostens. Untersuchungen zur politischen und sozialen Entwicklung in hellenistischer und römischer Zeit* (Stuttgart 1993).
- Raeck, W. “Der mehrfache Apollodoros: Zur Präsenz des Bürgers im hellenistischen Stadtbild am Beispiel von Priene.” In M. Wörrle and P. Zanker (eds.), *Stadtbild und Bürgerbild im Hellenismus, Kolloquium München 24.–26. Juni 1993, Vestigia 47* (München 1995) 231–40
- Rapoport, A. *The Meaning of the Built Environment* (Beverly Hills 1982).
- Roux, G. “Chronique des fouilles en 1954, Thasos, Agora.” *BCH* 77, 1955, 351 f.
- Schalles, H-J. “Die hellenistische Umgestaltung der Athener Agora im 2. Jh. v. Chr. – Ausdruck von Rationalität oder Entpolitisierung?” *Hephaistos* 1982, 97–116.
- Schuler, C. “Die Polis und ihr Umland.” In G. Weber (ed.), *Kulturgeschichte des Hellenismus* (Berlin 2007) 56–77.
- Sielhorst, B. *Hellenistische Agorai. Gestaltung, Rezeption und Semantik eines urbanen Raumes, Urban Spaces 3* (Berlin 2015).
- Sitte, C. *Der Städtebau nach seinen künstlerischen Grundsätzen: Ein Beitrag zur Lösung moderner Fragen der Architektur und monumentalen Plastik unter besonderer Beziehung auf Wien* (Wien 1889).
- Stemmer, K. (ed.) *Standorte: Kontext und Funktion antiker Skulptur, Ausstellungskatalog Berlin* (Berlin 1995).
- Thompson, H.A., and R.E. Wycherley. *The Agora of Athens: The History, Shape and Uses of an Ancient City Centre*, The Athenian Agora 14 (Princeton, NJ. 1972).
- Thüngen, S. *Die frei stehende griechische Exedra* (Mainz 1994).
- von den Hoff, R. “Eine neue Replik des Plutos aus der Statuengruppe der Eirene des Kephisodot.” In H. von Steuben, H-G. Lahusen, H. Kotsidu, and P.C. Bol (eds.), *MOYSEION. Beiträge zur antiken Plastik, Festschrift Peter Cornelis Bol* (Möhnesee 2007) 307–19.

- von den Hoff, R. "Die Bildnisstatue des Demosthenes als öffentliche Ehrung eines Bürgers in Athen." In C. Mann, M. Haake, and R. von den Hoff (eds.), *Rollenbilder in der athenischen Demokratie. Medien, Gruppen, Räume im politischen und sozialen System*, Kolloquium Freiburg i. Br. 24–25 November 2006 (Wiesbaden 2009a) 193–220.
- von den Hoff, R. "Hellenistische Gymnasia: Raumgestaltung und Raumfunktionen." In A. Matthaei and M. Zimmermann (eds.), *Stadtbilder im Hellenismus, Die hellenistische Polis als Lebensform 1* (Berlin 2009b) 245–75.
- von Hesberg, H. "Bemerkungen zu Architekturepigrammen des 3. Jahrhunderts v. Chr." *JdI* 96, 1981, 55–119.
- von Kienlin, A. "Das Stadtzentrum von Priene als Monument bürgerlicher Selbstdarstellung." In E.-L. Schwandner and K. Rheidt (eds.), *Macht der Architektur. Architektur der Macht*, Kolloquium Berlin 30. Oktober–2. November 2002 (Berlin 2004) 114–20.
- Wacker, C. "Die bauhistorische Entwicklung der Gymnasien. Von der Parkanlage zum 'Idealgymnasion' des Vitruv." In P. Scholz and D. Kah (eds.), *Das hellenistische Gymnasion* (Berlin 2009) 349–62.
- Webb, M. (eds.) *Die Mitte der Stadt. Städtische Plätze von der Antike bis heute* (Frankfurt a. M. 1990).
- Zucker, P. *Town and Square: From the Agora to the Village Green* (New York 1959).

5 The memory remains

Non-verbal symbolic communication and the planning grid at Pednelissos (Pisidia, SW Turkey)¹

Ahmet Çinici

Introduction

The architect Amos Rapoport uses the term ‘non-verbal communication’ to indicate a communication mechanism through the environment, particularly the built environment, that functions to organise social relations and acts as a mnemonic device reminding people of the behaviour expected of them.² A large amount of literature exists on how a non-verbal communication mechanism operated in antiquity through the use of common elements and symbols as well as building types in the built environment, which were carefully arranged to create encounters between people and those elements of the built environment having symbolic associations.³ It was through these encounters that the message embodied in the elements of symbolic significance was conveyed. Elements functioning in the non-verbal communication mechanism will be referred to as *symbolic elements*, while the encounters between these elements and people, through which a message is conveyed, will be referred to as *symbolic encounters* throughout this chapter.

Symbolic encounters could take various forms in the urban context of antiquity. They could take passive forms and involve simply viewing a symbolic element and decoding the message communicated by that element.⁴ Such encounters involved an *observer*, who viewed the particular element of the landscape, and an *observed*, which was the symbolic element viewed, interpreted and attributed a meaning by the observer. For instance, when a person encountered and viewed an honorific monument in antiquity he or she would understand that the person to whom the monument was dedicated had been an influential and powerful individual in the society and that his heirs claimed that they followed him and possessed the power and might he once had.

Symbolic encounters could also take active forms and engage an individual to participate in the activities facilitated by the symbolic elements. In such encounters, the observer went beyond the passive act of observing and became a participant of the activity related to that symbolic element. In this way, while the person experienced his or her own individual encounter, he or she also became a part of the encounters of other people. A common form of active encounters in the ancient context was to utilise a public building, which, in addition to its function, also meant participation in and promotion of a certain way of life. For example, a person taking part in the political discussions in the agora in the ancient Greek context would have indicated that, in addition to sharing their thoughts on the subject of discussion, he or she acknowledged the values of the society and claimed to be a respectful component of that society. By doing what was seen as necessary, respectful, responsible and duty bound,

he or she not only took part in the preservation of values and socially embraced rituals; they also encouraged the transmission of these to younger generations. As similar encounters took place repeatedly through time, the location where these encounters took place, in this case the agora, would have gained meanings and symbols associated with the encounters it housed. It can well be stated, therefore, that the agora in the Hellenistic society had become a symbol of social life and civic values, as well as a transmitter of the same values. Similarly, a person bathing in a bath-house in the Roman context, in addition to cleansing and indulging in pleasure, indicated that he or she acknowledged and took an active part in the culturally set social life. In this way, he or she also promoted and participated in the dissemination of that particular way of life. The bath-houses consequently would have become associated not only with bathing but also with the Roman way of socialisation and recreation. As similar active encounters with public buildings took place again and again during day-to-day activities of people, the messages conveyed via non-verbal communication became inscribed onto the collective memory of citizens, which eventually created a sense of collective identity, shared values and a way of social life.

This contribution aims to investigate and exemplify how a mechanism of non-verbal symbolic communication via the built environment similar to that of other Greco-Roman cities operated in Pednelissos. The role of the planning grid in regulating the pattern of symbolic encounters and the development and change of this pattern through time will be questioned. As the most well-preserved elements of the archaeological record and visually the most conspicuous symbolic elements of the built environment, monumental public buildings and the encounters they generated will be the focus.

Planning and grid

The highland area around the Lake District in SW Asia Minor was known as Pisidia in antiquity and was characterised by massive mountain ranges alternating with deep river valleys, plains and a number of lakes of different sizes.⁵ With its visual inaccessibility and limited transportation facilities due to the rugged morphology of the region, Pisidia represented an uncivilised landscape associated with hostility in the eyes of neighbouring communities.⁶

The ancient city of Pednelissos was located towards the southern fringes of Pisidia, on the SW slopes of a free-standing rocky mountain, the modern name of which is Bodrumkaya. Though Bodrumkaya is not the highest peak in the area, its rapid rise and steep slope give it a visual dominance in the skyline. This steep terrain and the commanding position of the city provided strategic advantages on the one hand, but on the other, constituted a difficult landscape to settle in with obvious difficulties of construction, transportation and agriculture. Pottery finds indicate an uninterrupted inhabitation in the city from at least the third century BC through to the seventh century AD, and probably onwards into the twelfth century AD.⁷

Pednelissos spreads over two fortified areas. The larger of these, located at a slightly higher altitude and a relatively steeper terrain, is called the upper city. Three gates, in the north, west and south (nos. 3–5 respectively in Figure 5.1), each protected with a tower, provided access to the upper city.⁸ The oldest sections of the upper city fortifications are dated to the last quarter of the third century BC.⁹ The second fortified area, called the lower city, is situated immediately below and adjacent to the SW of the upper city. An arched gate with a tower above (no. 6 in Figure 5.1) provided access to

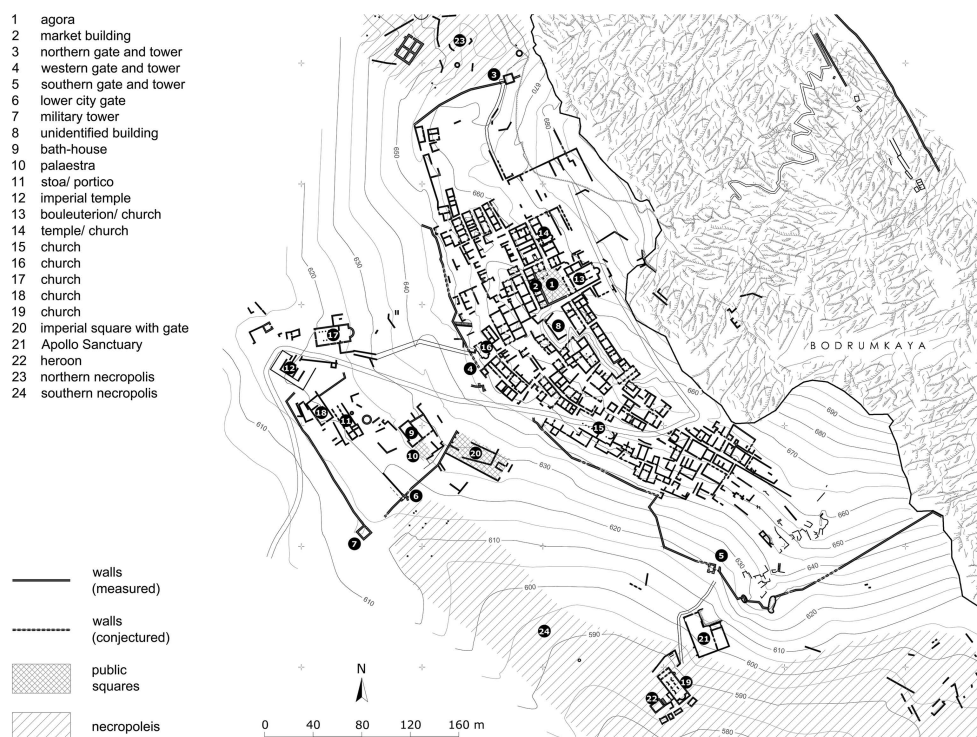


Figure 5.1 General plan of the remains at Pednelissos

Source: Topographical Map Pednelissos Project@, adapted by the author.

the lower city and it was protected by a further tower (no. 7 in Figure 5.1) to the SW of the gate.¹⁰ The lower city fortifications are dated to the second century BC,¹¹ and therefore must belong to an expansion phase of the city.

The city was laid out on terraces (see Figure 5.2). It is clearly evident particularly in the upper city that the terraces conform to a loose grid pattern following the contours of the terrain. Long and narrow rectangular blocks of the grid extend along the SW face of Bodrumkaya with their longer sides straddling across and cutting the slope. Streets running roughly in the NW – SE direction across the slope have milder gradients and intersect at roughly perpendicular angles with the NE – SW streets, which extend along the slope and often have steps to compensate for the steep topography. Pednelissos therefore exemplifies the application of the *grid-iron* principle in a *loose* way to fit into an irregular and steep terrain. This *loosely-applied* grid is the most peculiar feature of Pednelissos and differentiates it from other cities of Pisidia.¹²

Two major axes are identifiable in the planning grid of Pednelissos. The first one extends from the northern gate of the upper city to the agora and is traceable further SE for a long while. It would have connected to the southern gate in its original phase, though this is not physically traceable today. The second axis, on the other hand, extends from the lower city gate to the agora, where it intersects with the first major



Figure 5.2 Building blocks, axes and major streets of Pednelissos

Source: Topographical Map Pednelissos Project@, adapted by the author.

axis. The resemblance of these two axes to the *cardo maximus* and *decumanus maximus* of a typical Roman city is noteworthy.

Symbolic elements of the built environment

The upper city: the civic centre and Hellenisation of Pednelissos

A central location within the grid was occupied by the civic centre of the city. An agora (no. 1 in Figure 5.1) and a market building¹³ (no. 2 in Figure 5.1), both of which are dated to the late Hellenistic period and seem to have been in use throughout the whole occupation period of the city, formed the focus of this centre.¹⁴ The SE part of the agora was occupied by a large basilical church¹⁵ (no. 13 in Figure 5.1). Reused architectural fragments from earlier buildings and wall sections with different visual characters suggest that this church was rebuilt or converted from an earlier building.¹⁶ A public assembly space, possibly a *bouleuterion*, would perfectly fit to this point in the context of Hellenistic cities of Pisidia.¹⁷

A smaller church (no. 14 in Figure 5.1) existed to the north of the agora along the NW – SE main axis.¹⁸ A large amount of *spolia* from an earlier temple, which is dated to the late second/early third century AD and probably existed around the same

location, was used in the construction of this church.¹⁹ Another large basilical church²⁰ (no. 15 in Figure 5.1) was situated approximately 100 m to the SE of the agora; whereas, a smaller church²¹ (no. 16 in Figure 5.1) stood immediately to the north of the western gate and along the NE – SW axis of the grid.

Finally, for the upper city, a distinct building immediately to the south of the civic centre stands out with its large size and massive building blocks (no. 8 in Figure 5.1). Though its function has not yet been identified, its central location within the city as well as its size and quality of construction indicates that this was a monumental public building. A temple would be expected in this location in a Hellenistic period city of Pisidia; however, this cannot be proven without an excavation.²²

The lower city: the Roman impact

It is not easy to conclude whether the grid was also applied in the lower city since most of the buildings other than the monumental ones have not been preserved. A Roman period bath-house²³ and adjacent palaestra²⁴ (no. 9 and 10 respectively in Figure 5.1) to the NE of the gate suggest that a grid similar to that of the upper city existed here as well, since their shape and orientation resemble the building blocks of the upper city.

To the west – NW of the bath-house, a line of cut stone blocks extending in the NW – SE direction is visible on the surface (no. 11 in Figure 5.1). A geo-physical survey showed that this was part of a long and narrow rectangular building, possibly a stoa/ portico with a series of rooms behind.²⁵ This long and narrow building also parallels the loosely-laid grid blocks of the upper city. In contrast to the orientation of the bath-house, palaestra and the stoa/ portico, a Roman imperial period temple podium in the westernmost part of the city²⁶ (no. 12 in Figure 5.1) and a large basilical church²⁷ (no. 17 in Figure 5.1) to the NE of the podium stand out with their irregular orientations that are irrespective of the grid.

In addition to these more or less well-preserved public buildings and spaces, a large but very poorly preserved building to the SE of the imperial temple is thought to have been a church (no. 18 in Figure 5.1).²⁸ Moreover, the geophysical survey indicates an anomaly to the east – NE of the lower city gate,²⁹ where the fortifications were apparently demolished and used in other constructions (no. 20 in Figure 5.1).³⁰ This geophysical anomaly is interpreted as an indication of large-scale building activity.³¹ A reasonable suggestion is that this part of the eastern fortifications of the lower city was demolished some time during the Roman imperial period and a public square extending beyond the original boundaries of the city was built.³² Construction of a new public square may have been a benefaction as well as a power display, a manifestation of a new order by the new ruler of the area. However, the fact that the orientation of the square resembles the orientations of the building blocks of the upper city may be an indication of a degree of respect to the existing order.

Outside the fortifications

An open-air sanctuary (no. 21 in Figure 5.1) situated approximately 45 m to the south of the southern gate and connected to the upper city via a paved street is one of the most important architectural features of Pednelissos located outside the fortifications. The sanctuary comprised a rock-cut relief identified as Apollo, which is dated to the late Hellenistic/early Roman periods.³³ It was fortified and a large church³⁴

(no. 19 in Figure 5.1) was built to the south of it in later periods. The building to the SW of the church, on the other hand, was a heroon (no. 22 in Figure 5.1) dateable to the second century AD as indicated by the architectural remains scattered around the vicinity.³⁵

Finally, two necropoleis, one to the north and the other to the south of the settlement (nos. 23–4 respectively in Figure 5.1), were in use from the Hellenistic period until the abandonment of the city. These comprised a number of tombs and honorific monuments such as osthotecae, sarcophagi and monumental tombs in temple form, which were lined especially along the roads reaching to the lower city gate and northern gate of the upper city.³⁶

Urban development and transformation

This overview indicates that the urban and architectural transformation of Pednelissos can be investigated in three periods, Hellenistic (c. 300 BC – 1 BC), Roman imperial (c. AD 1 – AD 300) and late antique (c. AD 301 – AD 600), each with its own motive, agenda and architectural language. The Hellenistic period was characterised in Pisidia by self-governing communities organised around a central city.³⁷ The most important public buildings in this period were those that were related to the political and economic independence as well as self-governance of cities. These included public squares, such as agorai, which were the arenas of civic and political life, public assembly spaces, such as bouleuteria, and market buildings, which provided a storage space for food supplies to survive during a siege or a bad harvest and indicated the running of a market economy that was central to the life of a city.³⁸ The Hellenistic period was the period in which Pednelissos acquired the appearance of a Hellenistic city with its monumental public buildings and squares, including the agora, market building and possibly the bouleuterion, public amenities and honorific monuments planned within a grid system. The Hellenistic period in Pednelissos was the time during which the city gained its Hellenistic identity and displayed and communicated this identity with buildings characteristic of this period.

During the Roman imperial period Pednelissos was characterised by a massive construction movement during which the city was adorned with typical buildings from the Roman building repertoire, such as the bath-house and the imperial temple. A previously occupied quarter of the city was re-arranged in the Roman fashion with monumental buildings and squares characteristic of Roman cities, which not only displayed the might of the conquerors, but also promoted the benefits of being a member of the Roman Empire. Therefore, it is possible to suggest that the Roman period focused on legitimising and praising the new conquerors of the region. The Roman urban culture was manifested in the built environment with Roman-style monumental public buildings throughout the settlement.

The subsequent late antique period, on the other hand, was marked in architectural terms by the decline and eventual abandonment of temples in favour of churches. The key development for the fifth and sixth centuries, particularly for smaller cities, was “the systematic devaluation of a city’s public buildings, apart from churches and related religious structures”.³⁹ Pednelissos was no exception to this general picture as evidenced by the large number of churches, some of which are of substantial dimensions, built during this period. Thus, the spread of Christianity changed the urban layout of Pednelissos dramatically. Churches of various size spread all over

the settlement, both inside and outside the fortifications, and eventually led to the abandonment of buildings in connection with pagan beliefs. It was Christianity this time that was praised, promoted and manifested in the built environment of the city through non-verbal communication.

This summary indicates that the built environment of Pednelissos was a medium of communication that manifested the spirit of the time. It was used for the display of power, identity creation and the promotion of certain ideas and beliefs. Urban features such as the monumental public buildings, military establishments, public squares and honorific monuments stand out as the most conspicuous tools of non-verbal communication traceable in the archaeological record. These symbolic elements communicated the identity of the city through the active and passive encounters they generated and a pattern can be traced in their distribution over the city layout.

Non-verbal communication network: the pattern of symbolic encounters and its relation with the planning grid

The symbolic elements of the built environment of Pednelissos identified as having taken part in the non-verbal communication network through the symbolic encounters they generated are marked on Figure 5.3 together with the grid blocks. It is inevitable that Figure 5.3 is biased in favour of the final phases of the occupation since the archaeological record is dominated by remains of the later phases and it is not always possible to comment on the earlier phases without further excavation. In many instances however, it is possible to establish a relative chronology and comment on the functions of buildings and time frames during which they were in use, which are also indicated.⁴⁰

It emerges from this figure that the distribution of symbolic elements was not random but followed a pattern, such that most of the symbolic elements of the city were located along certain streets. These streets are distinguished by the larger number of symbolic elements they gave visual and physical access to and therefore, by the greater number of symbolic encounters established along them than other streets. A person moving along these streets sequentially encountered many of the symbolic elements of the city and, thus, experienced an informal urban procession from one symbolic element to another, in other words, from one symbolic encounter to another that established communication between the observer and the observed. These streets, in this respect, are named *processional ways* and are also marked on Figure 5.3.

Processional ways comprised the backbone of urban transportation as they connected the major public buildings as well as the gates of the city in a more direct way than other streets and provided uninterrupted movement between them. The possibility and density of symbolic encounters were higher along the processional ways in comparison to those along other streets. Processional ways, in addition to their primary function of organising movement, would have acted as arenas of public display and thus took on an important role in the non-verbal communication. It is noteworthy that the main axes of the planning grid constituted the major processional ways. These were complemented and enhanced by approaches to the city gates from outside the fortifications and a small number of other major streets within the fortified area. In this respect, processional ways formed an interface of the planning grid and the non-verbal communication network.

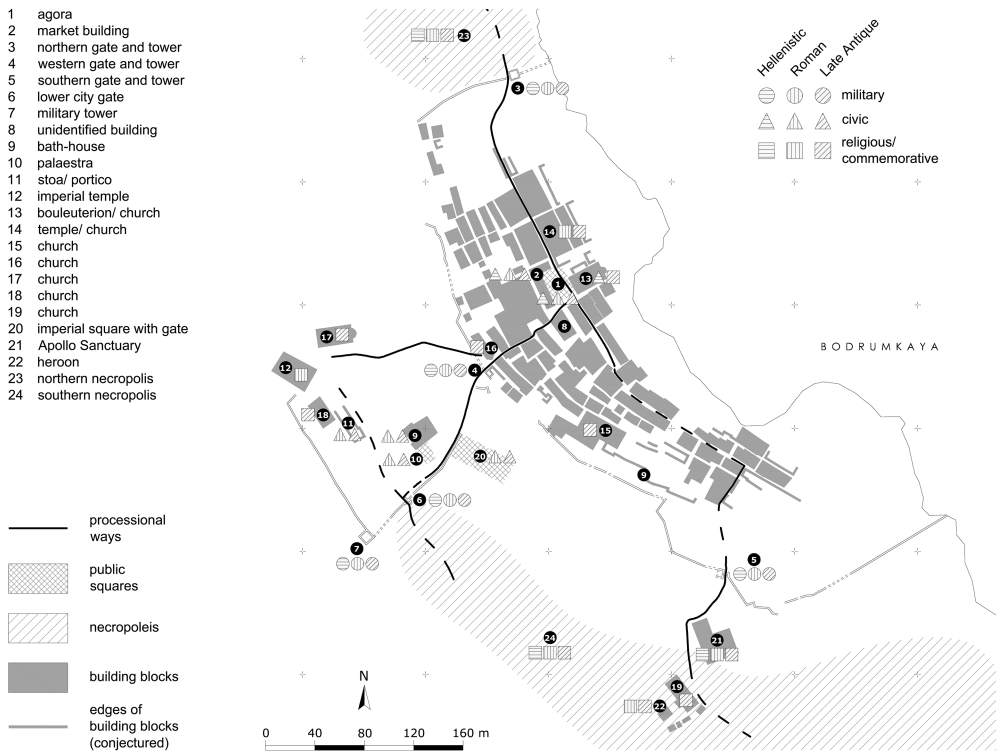


Figure 5.3 Continuity of the symbolic elements of Pednelissos

Source: Author.

The NW – SE axis of the grid and its extension outside the city walls were one of the major processional ways of Pednelissos. A person coming to the city from the north and going all the way down to the Apollo Sanctuary would have experienced many symbolic encounters along this street, which presented a picture of the occupants as well as the social dynamics of Pednelissos. The approach to the northern gate from outside the fortifications generated encounters along the way with tombs and honorific monuments in the necropolis that established links with the past of the city, leading families and their legacy. At the same time, the northern gate and its imposing tower as well as the fortifications provided an impressive backdrop and established yet another encounter symbolising the power of the city. On entry into the city the northern gate led onto one of the main axes of the planning grid, along which visitors confronted a temple in earlier times and a church in later times and thus encountered a locus of worshipping that remained unchanged in the cultural landscape. Visitors may have greeted these buildings or donated sacrifices to them, which were active encounters and gestures that showed respect towards the citizens and their beliefs. Next in the sequence, this street led into the agora where encounters symbolising the civic life took place. As such, this processional way took a person from the wilderness

of the Pisidian mountains into the heart of the civilisation, first showing the prominent Pednelissians, then revering the gods who were the guardians of the present and finally leading into the economic and civic hearth of the city. Further down the road beyond the agora, this processional way would have eventually connected to the southern gate. The southern gate gave access onto a paved street, which continued further to the Apollo Sanctuary and along which encounters of a religious nature took place. The symbolic importance of the area below the southern gate was emphasised from the earliest stages of the settlement by the Apollo relief, which was later surrounded by a sanctuary wall. Furthermore, a church was built nearby at an even later period. This area, therefore, was an important mnemonic place that not only reminded the viewer of the past beliefs but also embodied their adaptation into the current system of myths and rituals. The NW – SE axis of the urban grid and its extensions outside the fortifications, as such, constituted an uninterrupted corridor for symbolic encounters through the very centre of the built environment (see Figure 5.4).

Another significant processional way was the NE – SW axis and its extension outside the city walls. This processional way underwent some major changes over time through substantial additions. In the earliest phase of the settlement when the lower city had not been laid out, it must have been significantly shorter, comprising an approach to the western gate and the section of the axis of the grid in the upper city. The approach to the western gate remained within the urban area with the construction of the lower city fortifications during the expansion of Pednelissos. After this time this processional way gradually took the shape that is traceable today with the extension of the NE – SW axis of the urban grid from the western gate of the upper city to the lower city gate, and with the laying out of an approach from outside the fortifications towards the lower city gate. This approach to the lower city gate was very similar in character to that of the northern gate of the upper city. It passed through the

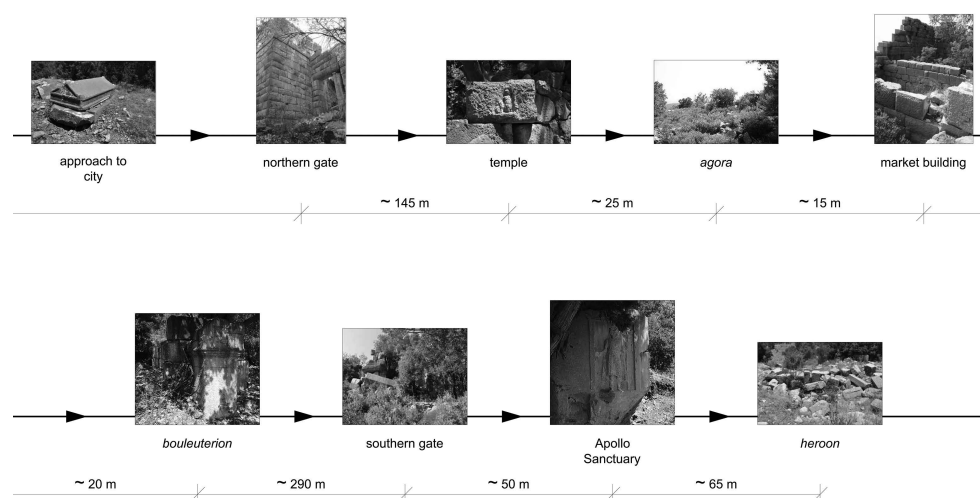


Figure 5.4 Places that generated symbolic encounters along the NW-SE main axis of Pednelissos during the Roman imperial period

Source: Photographs and diagram by the author.

tombs and honorific monuments of the southern necropolis. Along the way a silent communication occurred between the past of the city, the builders of this history and the observer. This approach was complemented with the sight of the impressive gate and the nearby tower as well as the SW fortifications of the upper city in the distance. Upon entry into the city, this processional way made a sharp turn to the right and continued towards the agora along a paved street. The bath-house and the imperial square, which represented the context of Roman urban life, were encountered along the lower stretch of this street. Further up, the western gate stood as the symbol of the physical power of the city as well as the guardian of the church beside it. Passing along and generating an encounter with the unidentified building which may have been a temple, this processional way finally terminated at the agora, where it intersected with the NW – SE axis of the grid (see Figure 5.5).

These main axes of the planning grid were further complemented by two other processional ways. One of these was the street from the temple and the church in the lower city to the church beside the western gate. This processional way connected symbolically significant locations, as emphasised by religious buildings, and joined the major NE – SW processional way at the western gate. The second one was the street from the lower city gate to the imperial temple and churches. Along this street the bath-house and the stoa/portico symbolised and communicated the civic benefits of Roman urbanism, while the temple in earlier times and churches in later times designated a religious focus.

Processional ways preserved their character of being the loci of symbolic encounters from the earliest phases of the settlement until its final abandonment. New processional ways were added to the existing ones with the development and spread of the city through time; however, the processional character of already existing thoroughfares was always preserved and emphasised and new processional ways were

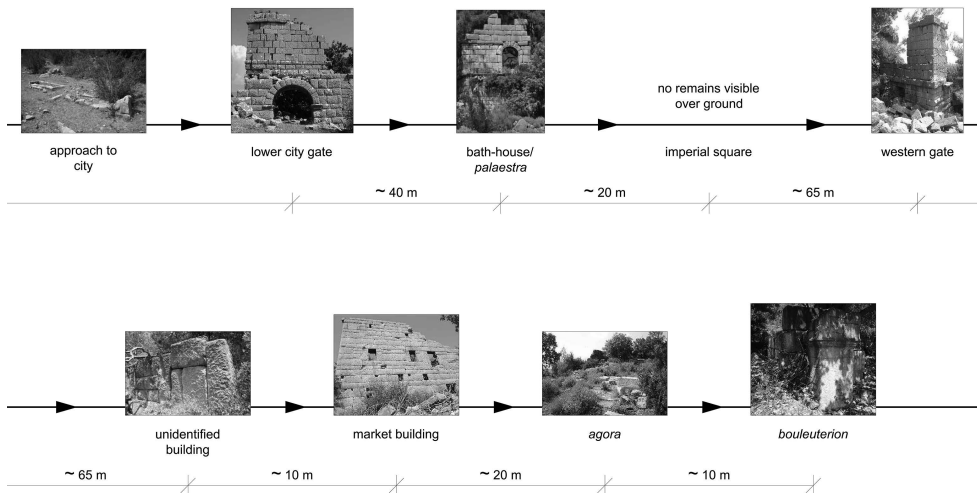


Figure 5.5 Places that generated symbolic encounters along the NE-SW main axis of Pednelissos during the Roman imperial period

Source: Photographs and diagram by the author.

incorporated to extend and enhance the existing structure, as exemplified by the NE – SW axis of the planning grid.

Similarly, locations comprising symbolic elements of non-verbal communication seem to have preserved their identities. Even though the content and message of this non-verbal communication changed through time, it was still the same location that provided the symbolic encounters. Moreover, the nature of the encounter also remained the same; that is, a location establishing symbolic encounters of a religious nature continued to provide religious encounters even if the belief systems, and hence related forms and symbolisms, changed dramatically. Likewise, locations establishing encounters of a civic nature remained to be associated with civic encounters. The only exception to this is the church in the SE of the agora, which is thought to have been associated with encounters of a civic nature earlier. This could be interpreted as an interference of the religious system into the civic system in the built environment.

Similarly, the areas around the Apollo Sanctuary and around the temple in the lower city seem to have been associated with encounters of a religious character from the very beginning until the end, as well as the necropoleis outside the city gates. It is noteworthy that the site chosen for the spatial manifestation of a new religious system coincided with, and even replaced, as in the case of the small church to the north of the agora, that of the previous one. One explanation to this could be that the collective memory that was programmed to look for encounters of a religious character at a certain point was inevitably biased to choose the same location also for encounters connected to the new religious system. Even when the belief system and symbols, imagery and practices associated with it radically changed, the locus of religious encounter remained the same.

In sum, it is seen that a number of symbolic buildings communicating a message of political, religious or ideological content were distributed over the planning grid. However, they were not arbitrarily spread around the city but arranged to occupy strategic points of the grid along major axes and processional ways in a way to increase the number of people who encountered these buildings and to strengthen the non-verbal communication they facilitated. As such, it can be suggested that the major influence of the loosely-applied grid was the *structure* it brought to the locations of symbolic elements within the urban layout rather than a rigid geometric order imposed on building blocks. The structure of the urban layout, which can be characterised by main streets connecting city gates and intersecting at a central location of the city where public buildings and squares were located, was a determining factor in the location of symbolic buildings that functioned in the non-verbal communication mechanism. This structure was not only a result of an aesthetic taste but also an outcome of a social structure and a way of communal living. Public appearance, whether in the form of carrying out duties and public affairs in the agora as in the Hellenistic period or in the form of bathing in the public bath-house as in the Roman imperial period, was a key aspect of this way of communal living. Streets, public spaces and public buildings housed, facilitated and articulated the way people appeared in public. These spaces were structured by a grid pattern, and the grid in turn structured the public appearance of people, day-to-day lives and social relations in general.

The continuity in the use of the grid throughout the whole occupation period of the city, which covers more than eight centuries extending from the foundation of the city in the third century BC at the latest until its abandonment in the seventh century AD at the earliest, indicates that this social as well as urban structure was deeply rooted.

Each of the succeeding periods transformed and added something to the contents of the grid; however, the idea of grid planning was not altered. Although the forms, contents and meanings of symbolic elements changed radically during this period, the structure of their arrangement within the grid also remained similar.

The symbolic importance of grid planning must also have been a factor in the adoption and continuous use of the grid at Pednelissos. Since grid planning was a standard phenomenon in the big and powerful metropoleis of the time,⁴¹ grid planning would have come to be symbolically associated with *civilisation*, *order* and *power*. Pednelissians must have adopted grid planning and adapted a version of the grid to suit their highland environment in order to claim their ties with the civilised world, manifest their claims for power and bring an order and structure to an irregular terrain. In an environment like Pisidia, which was viewed as primitive and uncivilised by its neighbours,⁴² this would have been an important and meaningful symbolic gesture. In this respect it can be suggested that the planning grid itself was a medium of non-verbal communication, which expressed and conveyed the aspirations and claims of Pednelissians.

Conclusions

Pednelissos was one of the Pisidian cities that incorporated a mechanism of non-verbal communication through the built environment like those in other Greco-Roman cities of antiquity. A number of public buildings, squares and monuments also functioning as tools of non-verbal communication to symbolise and convey political, religious or social messages were distributed over the city. A grid pattern was employed in a loose way to adjust to the irregular topography, which could also be interpreted to have been an act of symbolic importance manifesting the status and power of the city and claiming its ties with the *civilised* world. Use of the planning grid from the earliest times of the city until the final abandonment shows the continuity of the symbolic significance of it. The grid functioned as a tool to regulate and structure the distribution of the symbolic elements of the built environment and the pattern of symbolic encounters between these elements and people. The content of messages, form and symbolisms of non-verbal communication embodied in the built environment changed dramatically during the course of time. However, this change seems to have taken place gradually, embracing and slowly transforming the legacy of past symbolisms rather than radically and rapidly destroying them at once. This gradual change found its reflection in the built environment as a locational continuity of symbolic encounters of the same nature. The streets that stand out with greater numbers of symbolic encounters taking place along them also preserved their character and showed continuity throughout the life of the city. In conclusion, we can readily infer that although the forms and contents of non-verbal communication gradually changed, the pattern of symbolic encounters showed continuity and the collective memory remained in Pednelissos.

Notes

- 1 This article is based on the author's work in the Pisidia Survey Project towards his doctoral degree and is a substantially revised version of his paper presented in the EAHN 2012 conference in Brussels. The author would like to thank Lutgarde Vandeput and Veli Köse, directors of the Pisidia Survey Project, for their help and support during the project and Lale Özgenel for her comments on an earlier draft of this paper in addition to Daniel Millette and Samantha L. Martin-McAuliffe, the editors of this volume, for their comments and

suggestions. This work is dedicated to the memory of Sabri Aydal, an adept archaeologist, a tireless topographer and a great companion who left his mark on the archaeology of Pisidia . . . His memory remains.

- 2 Rapoport 1990.
- 3 See, for instance, Favro (1996) and Zanker (2000) for interpretations of non-verbal communication in antiquity; MacDonald (1986) for planning of symbolic encounters in Roman cities, Bergmann (1994) and Scott (1997), for interpretations of how a similar mechanism functioned in the domestic sphere in antiquity and Locock (1994) for similar mechanisms in different cultures.
- 4 See Elsner (1995) for the importance and role of *viewing* in the antique culture and as a medium of communication in antiquity.
- 5 Mitchell 1993a, 71.
- 6 Pisidians are usually described in ancient literature as warlike, semi-barbarian people living primitive lives isolated from surrounding civilised peoples and continuously posing menace to them; see for instance Strabo (12.7.3). Pisidians were renowned for their independence and resistance against attempts at direct control from outside and, as such, were readily classified by ancient writers as an unruly, undisciplined and marginal people (Mitchell 1995, 6, 1998, 237). The view of ancient writers is also accepted in early modern literature; see for instance Levick (1967, 16–20). Mitchell, emphasising the sophisticated cities Pisidians established and their governance structure organised along Hellenistic lines, criticises this view and thinks that this is only a part of the truth at best (1993a, 71–2, 1995, 6, 211, 1998, 237).
- 7 Vandeput et al. 2005, 241–2.
- 8 Vandeput and Köse 2003, 323.
- 9 Işın 1998, 114.
- 10 Vandeput and Köse 2003, 323.
- 11 Işın 1998, 113–4.
- 12 The residential area in the west of Cremna, another Pisidian settlement to the NW of Pednelissos, provides another example of a loosely-applied grid which was not rigidly imposed but adapted to the terrain resulting in irregular blocks of different sizes and shapes with changing orientations (Mitchell 1995, 160). However, Pednelissos is differentiated with the city-wide application of the grid and with the fact that the grid was applied from the earliest stages of the settlement, in contrast to Cremna in which the grid was adapted during the Roman imperial period.
- 13 See Köse (2005) for the origin and development of market buildings in Asia Minor.
- 14 Vandeput and Köse 2003, 321–2.
- 15 See Karas and Ristow (2003, 138–41 and fig. 3) for a description and plan of this church.
- 16 Vandeput and Köse 2003, 322–3.
- 17 Cities organised around a civic centre comprising an agora, a bouleuterion and a market building emerged in Pisidia during the period between the third and first centuries BC (Mitchell 1998, 243–4). Sagalassos exemplifies this scheme at a monumental scale (Waelkens et al. 1995). Other major examples include Selge (Machatschek and Schwarz 1981), Ariassos (Mitchell et al. 1989) and the ancient settlement at modern Melli, whose name in antiquity is not known (Vandeput and Köse 2001).
- 18 See Karas and Ristow (2003, 141 and fig. 4) for a description and plan of this church.
- 19 Vandeput and Köse 2004, 352; Işın 1998, 116–7.
- 20 See Karas and Ristow (2003, 143–8 and fig. 6) for a description and plan of this church.
- 21 See Karas and Ristow (2003, 142–3 and fig. 5) for a description and plan of this church.
- 22 Hellenistic style temples were typical features of many of the Pisidian cities and are viewed as an indication of a Hellenised society (Mitchell 1995, 33–4). Temples were often located close to civic centres in connection with other typical Hellenistic buildings such as agorai, bouleuteria and market buildings. The Doric temple overlooking the upper agora at Sagalassos (M. Waelkens 1993, 9–12) and the small temple across the bouleuterion at Ariassos (Mitchell 1991b, 160 and fig. 2) are two of the examples that fit into this pattern.
- 23 Vandeput and Köse 2004, 353.
- 24 Işın 1998, 118–9.
- 25 Vandeput and Köse 2004, 353; also personal communication with L. Vandeput.
- 26 Vandeput and Köse 2004, 352–3.

- 27 See Karas and Ristow (2003, 149–51 and fig. 10) for a description and plan of this church.
- 28 Personal communication with L. Vandeput.
- 29 Vandeput and Köse 2004, 353.
- 30 Vandeput et al. 2005, 241.
- 31 Vandeput and Köse 2004, 353.
- 32 Personal communication with L. Vandeput.
- 33 See Işın 2008. A similar representation of Apollo presented within an aedicula is found at Melli (Vandeput and Köse 2001, 143 and fig. 16). Other parallel representations came from Arpaliktepesi, nymphaeum F4 at Perge and various coins from Side (Işın 2008, 2010).
- 34 See Karas and Ristow (2003, 151–2 and fig. 11) for a description and plan of this church.
- 35 Işın 1998, 118.
- 36 Vandeput et al. 2005, 240.
- 37 Mitchell 1991a, 125.
- 38 M. Waelkens 2002, 63.
- 39 Mitchell 1993b, 120.
- 40 In this respect, squares represent religious buildings, triangles represent civic buildings and circles represent military buildings. Hatches filling in these shapes indicate the periods during which the buildings were in use; horizontal hatches being the Hellenistic, vertical being the Roman imperial and diagonal being the late antique period. One shape is placed for each of the period during which the building existed.
- 41 See, for instance, Ephesus (Scherrer 2001), Pergamon (Radt 2001) and Perge (Abbasoğlu 2001).
- 42 See Note 6.

Bibliography

- Abbasoğlu, H. 2001. "The Founding of Perge and Its Development in the Hellenistic and Roman Periods." In D. Parrish (ed.), *Urbanism in Western Asia Minor*, Journal of Roman Archaeology Supplementary Series 45, 172–88.
- Bergmann, B. 1994. "The Roman House as Memory Theater: The House of the Tragic Poet in Pompeii." *The Art Bulletin* 76, no. 2: 225–56.
- Elsner, J. 1995. *Art and the Roman Viewer*. Cambridge: Cambridge University Press.
- Favro, D. 1996. *The Urban Image of Augustan Rome*. Cambridge: Cambridge University Press.
- Işın, G. 1998. "The Ruins at Kozan-Bodrumkaya: Pednelissos." *Adalya* 3: 111–28.
- Işın, G. 2008. "The Cult of Apollo in Southern Pisidia and Apollo Sideton." *Ege Üniversitesi Arkeoloji Dergisi Özel Sayı* 12: 107–17.
- Işın, G. 2010. "The Great God Mamblasenos/ Apollo." *Bollettino di Archaeologia on Line* 1: 1–7.
- Karas, U., and S. Ristow. 2003. "Kirchenbauten in Pednelissos (Pisidien)." *Jahrbuch Für Antike Und Christentum* 46: 134–55.
- Köse, V. 2005. "The Origin and Development of Market-Buildings in Hellenistic and Roman Asia Minor." In S. Mitchell and C. Katsari (eds.), *Patterns in the Economy of Roman Asia Minor*, 139–66. Swansea: The Classical Press of Wales.
- Levick, B. 1967. *Roman Colonies in Southern Asia Minor*. Oxford: Clarendon Press.
- Locock, M. 1994. "Meaningful Architecture." In M. Locock (ed.), *Meaningful Architecture: Social Interpretations of Buildings*. Aldershot: Avebury.
- MacDonald, W.L. 1986. *The Architecture of the Roman Empire II, an Urban Appraisal*. New Haven, CT and London: Yale University Press.
- Machatschek, A., and M. Schwarz. 1981. *Bauforschungen in Selge*. Vienna: Österreichischen Akademie der Wissenschaften.
- Mitchell, S. 1991a. "Hellenization of Pisidia." *Mediterranean Archaeology* 4: 119–49.
- Mitchell, S. 1991b. "Ariassos 1990." *Anatolian Studies* 41: 159–72.
- Mitchell, S. 1993a. *The Celts in Anatolia and the Impact of Roman Rule*. Vol. 1 of *Anatolia: Land, Men, and Gods in Asia Minor*. Oxford: Clarendon Press.
- Mitchell, S. 1993b. *The Rise of the Church*. Vol. 2 of *Anatolia: Land, Men, and Gods in Asia Minor*. Oxford: Clarendon Press.

- Mitchell, S. 1995. *Cremna in Pisidia: An Ancient City in Peace and in War*. London: Duckworth.
- Mitchell, S. 1998. "The Pisidian Survey." In R. Matthews (ed.), *Ancient Anatolia: Fifty Years' Work by the British Institute of Archaeology at Ankara*, 237–53. Ankara: BIAA.
- Mitchell, S., E.J. Owens, and M. Waelkens. 1989. "Ariassos and Sagalassos 1988." *Anatolian Studies* 39: 63–77.
- Radt, W. 2001. "The Urban Development of Pergamon." In D. Parrish (ed.), *Urbanism in Western Asia Minor*, Journal of Roman Archaeology Supplementary Series 45, 43–56.
- Rapoport, A. 1990. *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Tucson, AZ: The University of Arizona Press.
- Scherrer, P. 2001. "The Historical Topography of Ephesos." In D. Parrish (ed.), *Urbanism in Western Asia Minor*, Journal of Roman Archaeology Supplementary Series 45, 57–93.
- Scott, S. 1997. "The Power of Images in the Late-Roman House." In R. Laurence and A. Wallace-Hadrill (eds.), *Domestic Space in the Roman World: Pompeii and Beyond*, Journal of Roman Archaeology Supplementary Series 22, 53–67.
- Vandeput, L., and V. Köse. 2001. "The 1999 Pisidia Survey at Melli." *Anatolian Studies* 51: 133–45.
- Vandeput, L., and V. Köse. 2003. "Pisidya Yüzey Araştırması Projesi: Pednelissos İlk Sezonu." In 20. *Araştırma Sonuçları Toplantısı* 1: 315–28. Ankara: TC Kültür Bakanlığı Yayınları.
- Vandeput, L., and V. Köse. 2004. "Pisidya Yüzey Araştırması: 2002 Pednelissos Sezonu." In 21. *Araştırma Sonuçları Toplantısı* 1: 345–60. Ankara: TC Kültür ve Turizm Bakanlığı Yayınları.
- Vandeput, L., V. Köse, M. Zelle, and E. Laufer. 2005. "Pisidya Yüzey Araştırması Projesi: Pednelissos 2003 Sezonu." In 22. *Araştırma Sonuçları Toplantısı* 2: 235–44. Ankara: TC Kültür ve Turizm Bakanlığı Yayınları.
- Waelkens, M. 1993. "The 1992 Season at Sagalassos: A Preliminary Report." In M. Waelkens and J. Poblome (eds.), *Sagalassos II: Report on the Third Excavation Campaign of 1992*, 9–41. Leuven: Leuven University Press.
- Waelkens, M. 2002. "The Transformation of the Public and Sacred Landscapes in Early Imperial Sagalassos." In C. Berns, H. von Hesberg, L. Vandeput, and M. Waelkens (eds.), *Patris Und Imperium*, 63–75. Leuven: Peeters.
- Waelkens, M., D. Pauwels, and J. Van Den Bergh. 1995. "The 1993 Excavations on the Upper and Lower Agora." In M. Waelkens and J. Poblome (eds.), *Sagalassos III: Report on the Fourth Excavation Campaign of 1993*, 23–46. Leuven: Leuven University Press.
- Zanker, P. 2000. "The City as a Symbol: Rome and the Creation of an Urban Image." In E. Fentress (ed.), *Romanization and the City: Creation, Transformations and Failures*, Journal of Roman Archaeology, Supplementary Series 38, 25–41.

6 Cyrene and Apollonia

The Classical urban plan as a measure of opposites

Lynda Mulvin

Greek and Roman societies are characterised as urban civilisations, with the formal layout of the orthogonal plan representative of the most tangible physical element of their urban centres.¹ In the case of Cyrene and Apollonia, two closely linked Cyrenaican cities in Roman Libya, each city introduced the orthogonal grid as a central unit of administration, which enabled the organisation of large areas of land into districts that were in turn sub-divided into smaller plots. In Cyrene, during the Hellenistic period, six districts were laid out across a steep incline with the *agora* situated in the centre of the grid. Space was at a premium. The city was subsequently aggrandised during the early Roman period with many fine monuments closely aligned on the constricted site (see Figure 6.1). Conversely, Apollonia (later Sozusa) increased the number of districts and sub-divisions as it was laid out across a long, narrow headland facing the sea without as many spatial restrictions, and its harbour was to act as Cyrene's harbour and port. Administratively as a city, Apollonia was parcelled spatially into approximately six or seven districts, the gates of the town giving onto each *insula* block, with the *agora* at the centre (see Figure 6.2).

The planning and application of the city grid in antiquity have been perceived collectively as a defining moment in the urban cityscape.² In Cyrene, an orthogonal grid was the underpinning structure of necessary planning in the city from the Hellenistic period until the city was badly damaged by an earthquake in the fourth century AD. However, it seems that as a compositional element, the grid did not always endure the development of the city. In Apollonia, the original grid became rendered obsolete as a new linear pattern emerged through alternate uses and external forces. It is clear from the evidence of emerging patterns in the late Roman city of Apollonia that the institution of the early Christian church created different pathways of activity. The church was directly connected to the monuments yet acted as a *caesura* along the routes. The city thereby developed a different structural arrangement that eschewed the grid plan. The centralised planning of the Roman city grid was later consciously adapted during a late antique planning phase, shifting the emphasis away from a centred, tightly controlled spatial plan towards a system of linear avenues and armatures which emerged as colonnaded streets. The mechanism for change is affected by shifts in human behaviour, driven by economic and social changes, which impacted on the spatial system in place in these ancient cities. The placing of an object such as a church in a new location creates a new focal point, and around this 'obstruction' an independent dynamic is gained and centrality gives way to a partitioned and linear aspect.³



Figure 6.1 General view of the constricted site of Cyrene

Source: Author.



Figure 6.2 View of districts, Apollonia

Source: Author.

The visual impact of the city site was a major factor in the planning of cities: it was a preoccupation of Greek and later Roman urban plan forms, where scenographic planning depended on the architectural exploitation of the landscape. This preoccupation was not sustained during the early Christian period. It is in this light that this contribution examines the Classical urban plan in the two cities and questions whether the order imposed by the grid enhanced and monumentalised the urban development of these cities or in fact impeded their growth. Describing how human factors can override the best-planned spaces, Ward Perkins noted that 'even the rare moments of pure invention' are 'loaded with the experience of the past'.⁴

Viewing the planning sequence chronologically in Cyrene and Apollonia allows us to observe conceptual shifts and differences. On one hand, the enduring coherence of the grid was the vital element of visual consciousness, with the spatial formation of monumental structures in each district arranged at specific points as showcase structures along the grid; they literally enlivened the plan. On the other hand, there is a mode of opposition to the grid, a form of 'ocular-centrism' where sightlines of organic routeways appear to overcome the rigidity of the grid plan and newly focused 'obstructions' cause different dynamic movements, thereby giving rise to variations in cultural activities.⁵ What later defined Medieval urban centres was the gentrification of certain quarters, which clustered around church buildings. The grid, it is surmised here, became less important as traditional Greek and Roman *mores* for living and social strata shifted in the city and gave way to other activities and priorities, which re-defined the use of city spaces during the late antique period. This can be linked to a widespread profusion of Christianity and Christian church building across North Africa.⁶

In a typical Hellenistic city, there was an emphasis on the pleasing visual effects on the senses. Hellenistic planners made use of distinctive topologies to create urban form. This is most graphically demonstrated by the significant role played by landscape in shaping the planimetric development of a city such as Cyrene. In the case of Cyrene, a breathtaking setting was incorporated as the city was sited across a deep ravine. The acropolis and lower agora were linked by elaborate walkways, with stairways connecting and solidifying the grid across a small area. In Hellenistic Apollonia, impressive walls were constructed along the length of the seaboard, marking out the districts of the grid as it was planned across the site, thus embracing the seascape; a narrow headland encompassed a navigable haven for passing ships. This Hellenistic sensibility of siting buildings in their physical setting was improved upon in the early Roman period as engineers and planners brought new theoretical speculation to planning and maximised spatial potential by introducing focal points while at the same time underpinning the orthogonal grid with essential pragmatic services: water sources and wider, more orderly streets linked to privately owned houses.

Such improvements were made in both cities: Cyrene and Apollonia seemed to strive towards maximum visual effect, using the original grid plan as a structure, with colonnaded streets connecting certain areas decorated with the addition of large-scale monumental structures and eye-catching trophy edifices.⁷ In both instances the prevalence of the 'imported façade' was apparent.⁸ In Cyrene, for example, the monumental Caesareum and basilica were added during the first century AD, which created a strong visual presence in this section of the city (see Figure 6.3).⁹ In Apollonia, the



Figure 6.3 Monumental Caesareum, Cyrene

Source: Author.

addition of the spacious Roman baths during the second century AD, linked to the forum area by a colonnaded walkway, served a similar purpose. Each city was ‘dressed’ with Roman trophy-monuments as part of a reshaping of their urban landscapes. On a further point of comparison, ongoing research in the context of Roman Asia Minor¹⁰ demonstrates how rival cities marked their territory with such monumental show-casing.¹¹

Cyrenaica

Historically, Cyrenaica was settled by Greek colonists during the late seventh century BC. Herodotus (iv, 151–2) described the foundation of the settlements by colonists from the island of Thera.¹² The pentapolis of five cities were established by the sixth century by Cyrene, Ptolemeis, Taucheria, Apollonia and Berenice.¹³ This region was controlled from afar by the Hellenistic kingdom of the Ptolemies in Egypt. Cyrene was ceded to Rome at the end of the first century BC and the region became a Roman province, known as Cyrenaica. Thereafter, until the beginning of the fourth century AD, it was governed by proconsuls together with the island of Crete.

Cyrenaica remained an outpost of Roman civilisation on the shores of the Mediterranean, assuming importance when Augustus stationed a fleet at Apollonia during the early first century AD.¹⁴ With the administrative reforms of Diocletian (AD 297) Cyrenaica was separated from Crete and divided into the provinces of Libya Inferior and Libya Superior.¹⁵

Cyrene

Cyrene was the leading city of Cyrenaica from its foundation in the seventh century to the early fourth century AD.¹⁶ The city was located along a valley of *Wadi Bel Gadir*.¹⁷ The valley drops steeply away from cliffs on the north side of the site upon which were located the city walls and the sanctuary on even steeper ground.¹⁸ The natural setting is one of great isolation where the south of the agora is reached by rock-cut stairs in the steep cliff.¹⁹ In 331 BC, Cyrenaica submitted to Alexander the Great and his successors, the Ptolemies of Egypt. As a result, the city was aggrandised to its greatest extent with the positioning of a grid as the overriding structure over the flat outlying areas of the town.²⁰ As with most Hellenistic cities in Libya and elsewhere by definition, the scenographic planning depended ever more on the architectural exploitation of the landscape, which is here situated on a sloping valley site. The grid organised the key elements of the city plan from the acropolis to the open, sloping terraced area of the agora.

Inscriptions and sculptures from the early first century AD suggest a period of growth during the reign of Augustus. Fine figural sculpture adorned newly constructed monumental structures.²¹ In AD 115, a Jewish revolt wreaked havoc in most sectors of the city. Improvements were made under Hadrian with additional buildings inserted into the grid plan at strategic locations.²² The acropolis was situated on the south side.²³ The Caesareum entrance in the upper area of the city was approached by two small flanking staircases immediately in front of the propylaeum (see Figures 6.4 and 6.5). The street called Battus led directly on to the agora and to the acropolis. Flanking the south side of the agora was an exedra with several honorary monuments such as a small Corinthian tetrastyle temple of the first century AD. These monuments were linked by the earlier Hellenistic Portico of the Herms, which adjoined the



Figure 6.4 Entrance to Caesareum, Cyrene

Source: Author.



Figure 6.5 Steps to Caesareum entrance, Cyrene

Source: Author.

southeast corner. At the centre of the city, a naval victory monument notionally linked the city to the sea and her harbour port of Apollonia (see Figure 6.6).

The upper thoroughfare was lined with free-standing commemorative monuments. Typical Roman monuments proliferated from one gate to another in combination; a major bath building and the presence of other distinctly Roman civic buildings were interrelated by the grid as a coherent architectural whole. A sense of monumentality was inherent in the large-scale buildings rising above their surroundings; the Caesareum was entered by flights of steps creating space and facilities for large crowds in a small geographical area.²⁴ Inserted with increasing frequency in confined spaces,



Figure 6.6 Naval victory monument, Cyrene

Source: Author.

other performance-led buildings were placed side by side, such as the odeion. This was positioned west of the Caesareum and created another busy urban venue.

The citadel contained sacred temples; a series of paths linked this citadel to the other valley where the Archaic sanctuary area was located. It included the sixth century Temple of Zeus at Cyrene.²⁵ A well-documented sequence of dating exists for this sanctuary site from 580 BC to 200 AD. The temple was destroyed in the Jewish revolt in AD 115 and rebuilding took place after this event.²⁶ Connective architecture was

installed in the form of porticoed walkways, which led towards these sacred public buildings. The grid remained the singular element of organisation within this confined geographical space. Order prevailed and was maintained indirectly by the underlying form of the orthogonal grid (see Figures 6.7 and 6.7a).



Figure 6.7 Caesareum boundary wall, Cyrene

Source: Author.



Figure 6.7a View of central housing district, Cyrene

Source: Author.

Overall, the sub-theme here is the continuity of urban planning practice from the Greek to the Roman period, which produced a coherent system of urban organisation: the siting of individual buildings in relation to each other and to their physical setting, producing the physical drama of the city. The difficulties of the site prove overwhelmingly that an inherited grid could be adapted for ease of purpose.

Apollonia

Apollonia/Sozusa was originally the port of Cyrene. It acquired the status of city and a distinctive name in the late Hellenistic period. Its civic territory was dependent on Cyrene. In many respects the lack of economic independence in the early period prevented the city from flourishing as a harbour and independent port in its own right. Apollonia was set to become one of the five pentapolis cities, and gained independence from Cyrene as a result during the later Hellenistic and early Roman period. It grew from relative obscurity to the seat of government of the pentapolis and by the fifth century AD, there was a noted gentrification of the city.²⁷ This shift meant a level of prosperity which can be connected to the Christianising of the city and with that the building of several elaborate churches. The hierarchy points to the presence of a bishopric and also in evidence was the presence of a governor's palace. In this regard both these public and private buildings were not set in opposition to one another but were inextricably linked. Taken together this suggests the evolution of a ruling Byzantine elite in the fifth and sixth centuries AD. Local sources remain silent on this development and Procopius does not refer to any new buildings connected to Justinian. Late references to the city suggest city walls were blocked up and abandoned by Arab invasions during AD 642.²⁸

Apollonia lay at the edge of a wide limestone ridge whose impressive height is 25.40 m. The sea eroded much of the shoreline and a significant portion of the main harbour has disappeared into the sea. The walls of the city were Hellenistic. They contained seven gates with the acropolis located on the eastern end. Eastern and western signal forts were located outside the city walls. Further to the west, beyond the city's perimeter walls, there was an Archaic temple located in a sanctuary. The theatre located outside the walls, hollowed-out of the sandstone ridge on the east side, was dated to the Hellenistic period. Its rock-cut form was remodeled in the late first century AD. A major avenue led to the theatre, which looked out to sea in a gesture embracing the seascape as a backdrop. The main traces of Roman buildings are the large baths dating to the second century AD located to the west of the agora.

As previously indicated, an earthquake in AD 365 destroyed much of Cyrenaica.²⁹ While this serves as a *terminus post quem* for many other Cyrenaican cities, it enabled Apollonia's brightest phrase of renewed monumentality. The city was rebuilt and restructured to include the construction of three intra-mural churches (see Figure 6.8).³⁰ In the city centre of Apollonia, a new pathway emerged which served the Christian community attending the churches. As the churches were aligned and positioned along this linear routeway, it demonstrated the way in which the collective memory of cities and smaller settlements could be altered with the introduction of new building forms.³¹

The churches did not encroach upon the earlier Roman buildings. This is a clear example of newly constructed monuments set within an ancient plan type following an ancient processional sequence yet operating above the existing grid. The linearity of the arrangement along a parallel causeway close to the seashore suggested this route superseded the grid plan to become the connective armature through the city.³²

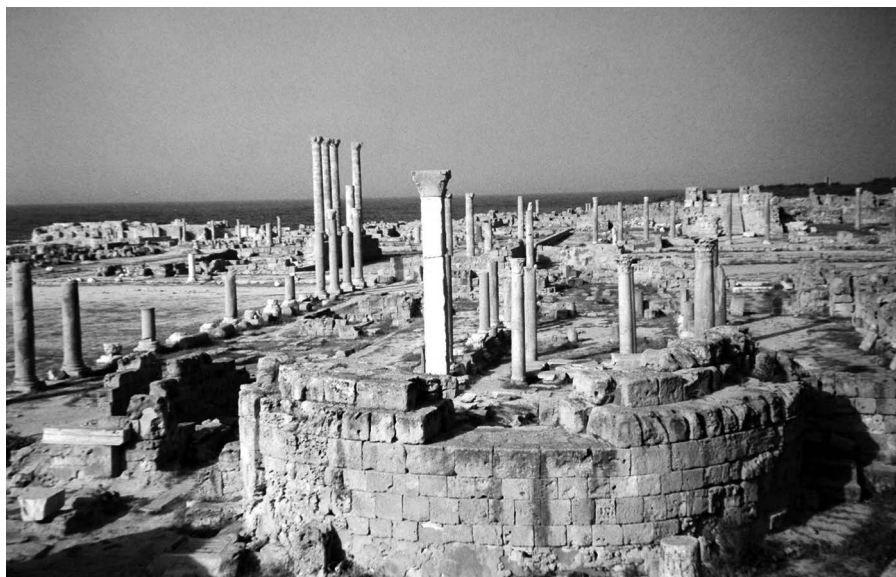


Figure 6.8 View of early Christian basilica, Apollonia

Source: Author.

These early churches became the main focal points of cultural activity in the city and their alignment and presence created not only a new type of monumentality but also a renewed sense of dynamic movement in the urban plan.

Conclusion

This type of comparative study enables us to examine the extent of the success of the utilisation of the Classical plan in the urban context and urban expansion of the cities of Cyrene and Apollonia in Roman Libya. The effect of urban scenography and the importance of the vista were paramount in each case. This was capitalised on during the Roman period by introducing innovative set-pieces of Roman trophy-building which helped to liberate the Hellenistic plan from its possible over-reliance on the setting. The new manner in Roman building, with its emphasis on axuality, the creation of artificial vistas and appreciation of the importance of building mass, demonstrated a different emphasis in architectural design, especially in the situation at Cyrene, where despite the small area of available land, the design potential of the site was fully realised.

A parallel study of this nature enables us to examine the extent of urban development in the context of Romanisation and to observe in the case of these Hellenistic cities and how their architectural landscape was reshaped and adapted to suit Roman rule. Cyrene can be read as the product of a lengthy process of development, where the first Greek citizens traversed from the religious sanctuary on a plateau along the Sacred Way to the agora. The deployment of the grid in the Hellenistic city facilitated the community's successful expansion, until natural acts, such as earthquakes, later caused discontinuity and the city fell into disuse.

Apollonia, by the sea, was planned with a grid and defense-walls to facilitate the functioning port. Urban renewal intensified during the late Roman period and it became an

important Early Christian and Byzantine centre. This spiritual impetus altered the focus of activity in the city so that the orthogonal grid was overcome organically as worshippers processed between the church buildings located strategically along certain direct pathways. In Apollonia, the urban grid was decimated to make room for new urban structures of a Christian nature, accommodating a new cityscape and framework – yet substantial portions of an earlier grid can be retraced and the wider plan can, to varying extents, be recovered. In both cases, as primary functions changed over time, pathways along sacred lines equated to religious memory, either by linking Classical sanctuaries on upper to lower city levels, or by establishing new routes to Byzantine churches which centred on a Sacred Way rather than remaining faithful to a formal grid.

In Cyrene, the grid established during the Hellenistic period became superior to an earlier organic linear arrangement. Cyrene was an extensive city site, which was settled for a long period of time. Apollonia, by contrast, was the port of Cyrene, laid out on a flat plain by the sea, which facilitated a harbour. The two cities were conjoined by a connecting main road. As its role became less dependent on Cyrene's economic generation, it became more independent as a city in its own right. In Apollonia, the Roman grid plan was subsumed into a sacred route posed by the construction of early Christian and Byzantine churches. A new order prevailed and adjusted the trend. Apollonia utilised a linear plan that was due to a change in use in the city, the physical manifestation of which suggested the underlying premise of ocularisation was no longer at the core of town planning needs.³³ With the introduction of Christianity to the city, three churches were aligned east-west in a linear fashion. There appears to have been a corresponding societal shift from the Roman practice of daily ritual visits to the agora – with its assembly of citizens – to a focus on a new form of purpose and congregation with Christianity. The Christian demands of attending several churches during one feast-day overcame the use of the grid plan. A quicker more direct route along a linear armature, a simple pathway cut through the grid, enabled ease of access to churches placed outside of existing Classical structures. This indicates that the grid no longer functioned as originally conceived as maintaining order and cultural exchange. It seems that while the grid imposed a necessary discipline within the confined geographical space of Cyrene, it functioned as a counterproductive mechanism when new directions in the social order emerged in Apollonia. Subsequently, the two cities appear to have developed over time as a measure of opposites.

Notes

- 1 Gates 2003, 1–10; Lehmann-Hartlebenn 1943, 22–9; Brine 1869, 326–3.
- 2 MacDonald 1986, 5–29.
- 3 MacDonald 1986: 5–29 and St John 2011, 3–5. See also Hilliard 2002.
- 4 Ward-Perkins 1974, 8–9.
- 5 Pallasmaa 2007, 2–5.
- 6 Leone 2007, 7–25. See also Mac Kendrick 1980, 324–7; Raven 1993, 144–66; Bergman 1982, 17–22.
- 7 Thomas 2007, 139–40.
- 8 Segal 1981.
- 9 Rives 2001, 425–36.
- 10 Segal 1981, 108–21. Also refer to ongoing research by this author in Roman Pamphylia: the cities of Perge and Side, during the second century AD, rivalled each other in reshaping their urban landscapes on a scale of magnificence not hitherto seen in other parts of Asia Minor. Collectively, their respective legacies were concentrated in the presence of monumental buildings. Both cities developed over time in identifiable chronological stages, the principal building phases being during the Hellenistic period (from third to second centuries BC), and subsequently the Roman period (from the first to second centuries AD), with

- varied patrons assisting in their improvement and with a noted gradual absorption of the landscape (Mulvin 2012a, 2012b, 17–25, 2014).
- 11 Another point of physical comparison that links these cities of Pamphylia and Libya: H.W. Blundell in the late nineteenth century photographed the walls of Apollonia and compared them to the walls of Perge as both were constructed to create an overwhelming impression of striking fortifications and with a degree of awareness to the site (Blundell 1895/96, 113–40).
 - 12 The Greek historian and geographer Strabo (book 17) referred to both cities, giving particular attention to Cyrene which he said had been founded by the inhabitants of Thera and linked to the Battus people. The city had longstanding relations and associations with Crete. Strabo described how the city flourished: ‘from the excellence of the soil, which is peculiarly adapted for breeding horses, and the growth of fine crops. It has produced many men of distinction, who have shown themselves capable of worthily maintaining the freedom of the place . . . having continued for some time to be governed by kings, it finally came under the power of the Romans. In the neighbourhood of Cyrene are Apollonia, Barca, Berenice, and other small towns close by’.
 - 13 Boardman 1966, 149–56.
 - 14 Jones and Little 1971, 64–9.
 - 15 Goodchild 1952, 142–52. For an update of recent research, see Mattingly and Hitchner 1995 and André Laronde 1994, 166–9.
 - 16 F.W. Beechey and H.W. Beechey 1828, 432.
 - 17 Recent archaeological investigations are working to establish the character of the site of Cyrene through GIS; see Cuttler et al. 2006, 1320.
 - 18 F.W. Beechey and H.W. Beechey 1828, 424.
 - 19 Late in the seventh century BC a Greek colonist, Battus, led a group of prospective colonists from Thera to North Africa. They settled on Cyrene, five miles inland, on the crest of Gebel Akhdar, an elongated mass of limestone nearly 2,000 ft high and 90 miles long separating Cyrene from the littoral. The precipitous face of Gebel at the lower stages was impassible. Therefore the route to sea roundabout and Apollonia was the nearest feasible stopping point at twelve miles from the parent city of Cyrene. The two sites were connected in antiquity by road in the Greek period and modified in the Roman period; see White 1966, 259–65.
 - 20 Luni 1994, 191–209.
 - 21 Walker 1994, 167–84.
 - 22 Caputo and Goodchild 1955, 106–15; Reynolds and Ward-Perkins, 1951.
 - 23 Stucchi, 1975.
 - 24 Vickers and Reynolds 1971–1972, 27–47.
 - 25 White 1981a, 13–30.
 - 26 Wright 1994, 185–90.
 - 27 Ellis 1985, 1988.
 - 28 Ellis 1988, 565–76 and Ward-Perkins 1965, 641–57.
 - 29 White 1966, 259–65.
 - 30 John Griffiths Pedley 1967, 141–7.
 - 31 Ward-Perkins and Goodchild 2003.
 - 32 MacDonald 1972, 24–30.
 - 33 Goodchild 1963 (1993).

Bibliography

- Beechy F.W. and Beechey, H.W. 1828. *Proceedings of the expedition to explore the northern coast of Africa from Tripoly eastward; in MDCCCXXI and MDCCCXXII*, 424. London: J. Murray.
- Blundell, H.W. 1895/96. “A visit to Cyrene in 1895.” *The Annual of the British School at Athens* 2: 113–140.
- Boardman, J. 1966. “Evidence for the Dating of Greek Settlements in Cyrenaica.” *The Annual of the British School at Athens*, 61: 149–156.
- Bergman, J. 1982. *Synesius of Cyrene Philosopher – Bishop*. Berkeley and Los Angeles: University of California Press.
- Brine, L. 1869. ‘Past and Present Inhabitants of Cyrenaica’ in *Transactions of the Ethnological Society of London*, Vol. 7: 326–333
- Caputo G. and Goodchild, R.G. 1955. “Diocletian's Price-edict at Ptolemais (Cyrenaica).” *Journal of Roman Studies* 45: 106–115.

- Cuttler, R., Gaffney, V. Goodchild, H., Rossiter, J. and Sears, G. 2006. *Cyrene Archaeological Project: Field Survey, GIS and Assessment 2006*, Birmingham Archaeology Report PN 1320.
- Ellis, S. 1985. "The Palace of the Dux' at Apollonia and Related Houses." In G.W. Barker, J.A. Lloyd, and J. Reynolds (eds.) *Cyrenaica in Antiquity (Society for Libyan Studies Occasional papers 1)*.
- Ellis, S. 1988. "The End of the Roman House." *American Journal of Archaeology* (4): 565–576.
- Gates, C. 2003. *Ancient Cities, The Archaeology of Urban Life in the Ancient Near East and Egypt, Greece and Rome*, London: Routledge.
- Goodchild, R.G. 1993. *Cyrene and Apollonia: an Historical Guide*. Tripoli.
- Goodchild, R.G. 1952. Mapping Roman Libya. *The Geographical Journal* 118 (2): 142–152.
- Griffiths Pedley, J. 1967. "Excavations at Apollonia, Cyrenaica Second Preliminary Report." *American Journal of Archaeology* 71(2): 141–147.
- Jones, G.D.B. and Little, J.H. 1971. "Coastal Settlement in Cyrenaica." *The Journal of Roman Studies* 61: 64–69.
- Lehmann-Hartlebenn, K. 1943. "The Impact of Ancient City Planning on European Architecture", *Journal of the American Society of Architectural Historians*, Vol.3, No.1/2 (Jan.-Apr. 1943): 22-29.
- Leone, A. 2007. *Changing townscapes in North Africa from Late Antiquity to the Arab Conquest*. Bari: Edipuglia srl.
- Luni, M. 1994. "Il Forum – Caesareum Di Cirene." *Libyan Studies* 25: 191–209.
- MacDonald, W. L. 1986. *The Architecture of the Rome Empire, Vol. II, An Urban Appraisal*. New Haven: Yale University Press.
- MacKendrick, P. 1980. *The North African Stones Speak*. Chapel Hill, NC: University of North Carolina Press.
- Mattingly, D. 1994. Mapping Ancient Libya. *Libyan Studies* 25: 1–5
- Mulvin, L. 2012. *Perge and Side: the 'Mad Men' or Rival cities of Roman Pamphylia*. Paper presented at the Annual Meeting of the Society of Architectural Historians, Detroit, 18–21 April 2012.
- Mulvin, L. 2012. Charles Robert Cockerell and Ionian Antiquities in the Gennadius Library, *A Culture of Translation: British And Irish Scholarship in the Scholarship in the Gennadius Library (1740-1840), New Griffon Series*, 13: 17–25.
- Mulvin, L. 2014. *Engendering Ancient Rome: Two Women of Ancient Perge*. Paper presented at the Art and Gender Conference, Lisbon, 24–26 October 2014.
- Pallasmaa, J. 2007. *The Eyes of the Skin Architecture and the Senses*. London: Wiley.
- Raven, S. 1993. *Rome in North Africa*. London: Routledge.
- Reynolds J.M. and Ward-Perkins, J.B. 1951. *Inscriptions of Roman Tripolitania*. Rome: British School at Rome.
- Rives, J. B. 2001. Imperial Cult and Native Tradition in Roman North Africa, *The Classical Journal*, Vol. 96. No.4 (Apr-May 2001): 425–436.
- Segal, A. 1981. Roman cities in the province of Arabia, *Journal of the Society of Architectural Historians*, 40(2) (May 1981): 108–121.
- Strabo. The Geography of Strabo. Trans. Horace Leonard Jones. Loeb Classical Library. Cambridge, MA: Harvard University Press 1932.
- Stucchi, S. 1975. *Architettura Cirenaica*. Rome: L'Erma Breitschneider.
- Thomas, E. 2007. *Monumentality and the Roman Empire*. Oxford: Oxford University Press.
- Vickers, M.J. and Reynolds, J.M. 1971 – 1972. "Cyrenaica' 1962–72." *Archaeological Reports* (18): 27–47.
- Walker, S. 1994. "The Imperial Family as Seen at Cyrene" *Libyan Studies* 25: 167–184.
- Ward-Perkins, J.B. 1974. *Planning and cities, cities of ancient Greece and Italy: planning in classical antiquity*. New York: G. Braziler.
- Ward-Perkins, J.B. and Goodchild, R.G. 2003. "Christian Monuments of Cyrenaica." J.M. Reynolds (ed.) *Society for Libyan Studies*, Monograph 4. Hertford.
- White, D. 1966. "Excavations at Apollonia, Cyrenaica Preliminary Report." *American Journal of Archaeology* 70(3): 259–265.
- White, D. 1981. "Cyrene's Sanctuary of Demeter and Persephone: A Summary of a Decade of Excavation." *American Journal of Archaeology* 85: 13–30.
- Wright, G.R.H. 1994. "A note on the temple of Zeus at Cyrene and its Re-erection." *Libyan Studies* 25: 185–190.

7 Privileged topography

Vitruvius and the siting of Halicarnassus

Daniel Millette

Introduction¹

The ancient site of Halicarnassus is well-known today, as it would have been during the time of Vitruvius.² The city is often cited, particularly as connected to one specific ruler, Mausolus, who moved significant numbers of inhabitants to the settlement, all-the-while strengthening its walls and building, or rebuilding, an impressive array of monuments during his rule over the Carian dynasty (377–53 BC). The largest of these monuments was a mausoleum, dedicated to himself.³

Vitruvius describes the place in relative detail, assigning it considerable importance: It has in fact been relatively unacknowledged in the literature that approximately eight percent of all monuments and sites mentioned in *De architectura* are located at Halicarnassus. It is a key site for the writer, occupying a central position in his Book II.

This is noteworthy: Why would the Roman architect focus specifically on this city, so far removed from his own architectural context? Why does it figure so prominently in his geographical imagination? Certainly, the topography of Halicarnassus is one that depicts a classic landscape of power with, as highlighted below, its multi-tiered and hill-sited monuments dominating the landscape; the impact on the viewer still is and would have been considerable in antiquity. The topography itself offered advantages that, blended with what could be called a *loose* grid, enabled a dynamic and defensible civic assemblage that would have awed and inspired any urban participant or visiting outsider. Aside from the spectacular topographical advantages, however, there may have been at least one other reason for Vitruvius' focus on the site.

This chapter emphasises two notions: First, the plan-topography of Halicarnassus as one which is privileged, memorable and exemplary, all in spite of its challenging location and in spite of our possible 'mis-aligned' views of it. And second, the links of the site to Vitruvius' architectural and planning imagination are examined in closer detail. While the two notions are developed under separate headings, they overlap and the conclusion proposes a reason for Vitruvius' very deliberate and detailed references to the city.

Halicarnassus: topography and plan

In *De architectura's* Book II (8), Vitruvius discusses a variety of masonry types and techniques, providing examples of brick construction, including the methods employed at the palace of Mausolus at Halicarnassus.⁴ The text quickly moves from an argument for the use of brick, then to a description of the city site. The setting is first highlighted as being in the form of a natural theatre surrounding a bowl-shaped port.

Vitruvius then moves to a descriptive account of the main monuments; it is well worth quoting a portion of the text:

[Mausolus] . . . observed at Halicarnassus a place naturally fortified, a suitable market, and a useful harbour, and there he established his palace. Now that place is like the curvature of a theatre. The forum is placed at the lowest level of the harbour. But about the middle of the natural amphitheatre and, as it were, in a cross gangway, a street is constructed of ample width, in the middle of which the Mausoleum is built of such splendid workmanship that it is named among the Seven Sights of the world. In the middle of the top of the citadel is a temple of Mars having a statue of a colossus with marble extremities made by the famous hand of Leochares, others by Timotheus. On the right wing at the top is a temple of Venus and Mercury against Salamacis' fountain itself . . .⁵

The site description then moves towards a depiction of the location of Mausolus' palace. Regarding its strategic location, Vitruvius writes:

Since now I am brought to the description of these walls, it remains to outline . . . the royal palace . . . From it there is seen on the right side the forum and harbour and the whole circuit of the walls; under the left there is a secret harbour lying hid under high ground, in such a way that no one can see or know what is going on in it, so that the king from his own palace could see what was necessary for his sailors and soldiers without anyone else knowing.⁶

So there we have it: Halicarnassus of Antiquity. Or perhaps more precisely, the Halicarnassus of Vitruvius. The description is indeed evocative and does depict an ideal landscape in terms of both defense and power, complete with a secret harbour and vantage points for the elite to observe the populace at war and within their day-to-day lives. The site includes several important and key planning features, including the naturally enclosed double-port, layered terraces and a set of high observational and defensive points along the many hills surrounding the same port. The hills, from which the latter views are enabled, together form a bowl-shaped site, and this is the "theatre" that Vitruvius alludes to in his Book II (8, xi). Monuments and other significant buildings are located along natural terraces. The theatre is a good example and the topographic advantages can still be felt from a modern road constructed atop one of the main "street[s] . . . of ample width" that Vitruvius references,⁷ as well as the strategic gate called the Myndos Gate controlling access to the main city road built along a second natural terrace, and the probable palace, onto which is built a later fort, located on a further, higher, terrace. The mausoleum that has become resident in our collective memory is located at approximately half-way, east-west, along the principle city road. Very little of it remains.

Several urban plans have been partially completed by archaeologists. The 1994 plan by Hoepfner and Schwandner (see Figure 7.1)⁸ has been reproduced many times, including adaptations such as the one by Thomas Nobel Howe (see Figure 7.2), who generated his to accompany a significant English language translation of *De Architectura*.⁹ From the Hoepfner and Schwandner plan, we can readily confirm the principle set of planning features: The natural topography, which indicates the hills and the terraces onto which are located roadways and most significant monuments; the

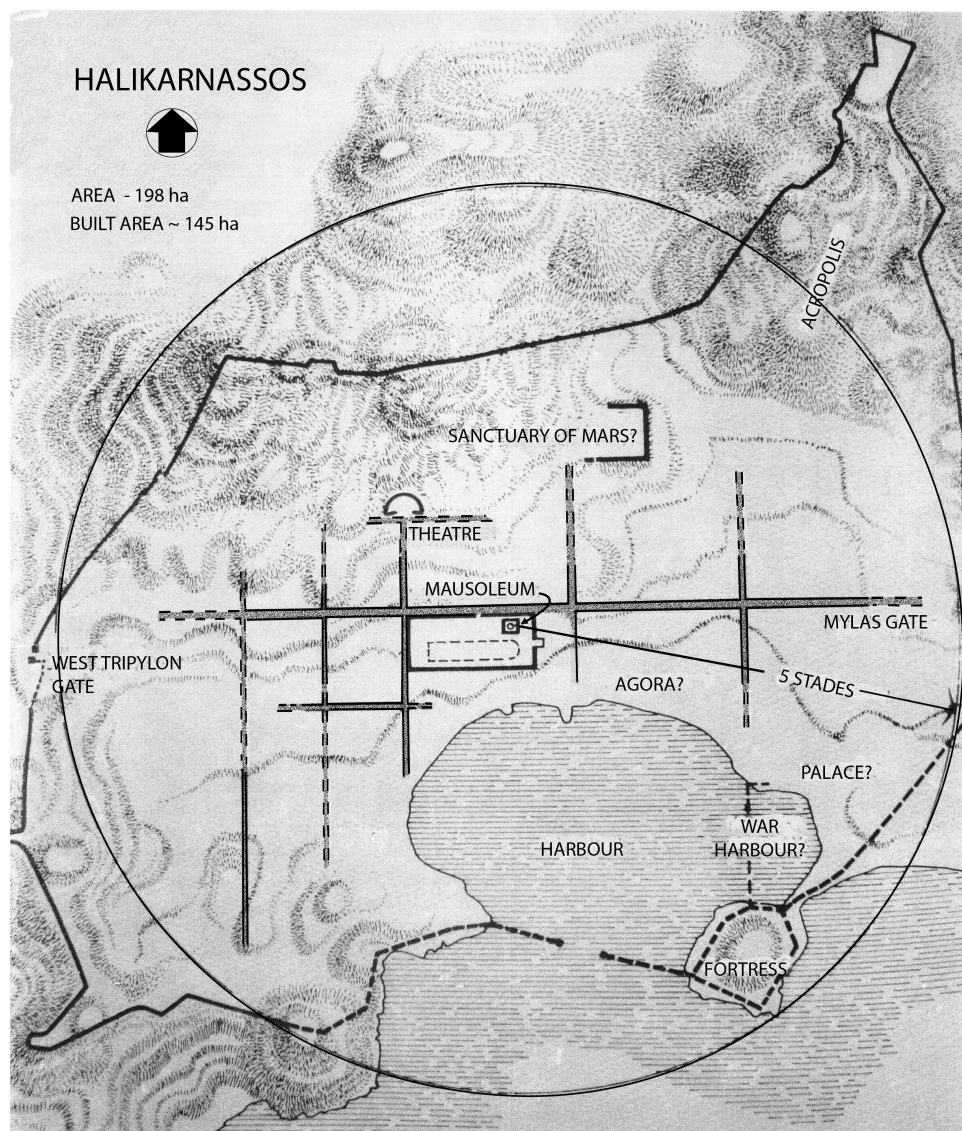


Figure 7.1 Halicarnassus

Source: Plan based on Hoepfner and Schwandner 1994, p. 227. Amendments by Samantha L. Martin-McAuliffe.

city walls, several sections of which are still somewhat easy to locate;¹⁰ the siting of principle monuments, including the mausoleum, theatre, probable palace location and possible temple locations; and a grid, clearly delineated on the map. From detailed site inspections, it has been possible to ascertain that the east – west transportation arteries are located primarily on natural terraces. The north – south roadways are more

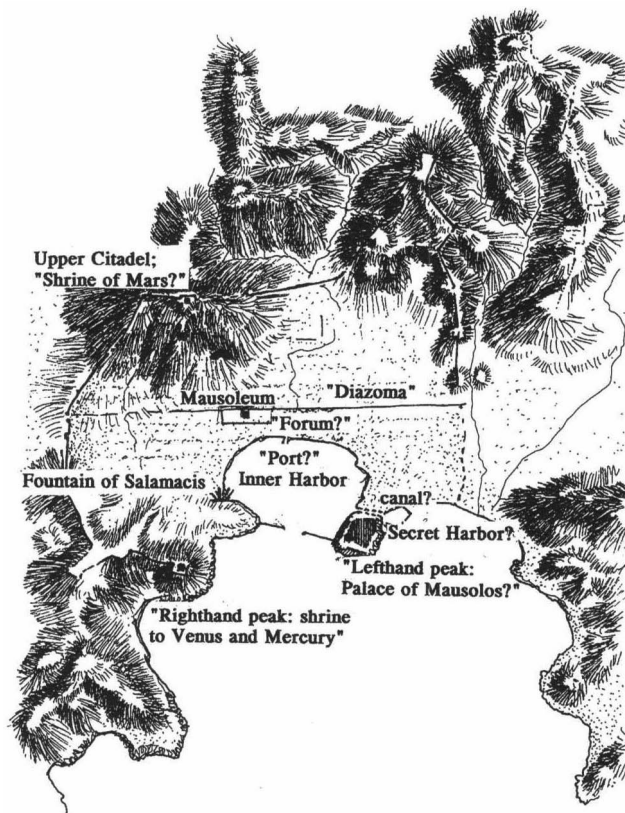


Figure 7.2 Halicarnassus

Source: Rowland and Howe 1999, Figure 34, p. 185. Plan by Thomas Nobel Howe.

difficult to identify, especially in terms of their *rigidity* – they are hence dotted on the plan. Thus the diagram suggests an orthogonal grid, while not presenting it definitively. That is to say that it is not clear if a grid was actually emplaced upon the site in a rigid geometrical fashion. I say this with two main notions in mind: On the one hand, the eastern and western gates to the city do not appear to have been aligned with the east – west corridor, while on the other hand, and perhaps more importantly, the north – south grid lines, most of which have been traced in dotted lines on the diagram, remain for the most part hypothetical.¹¹ Noble Howe schematically replicates the drawing by Hoepfner and Schwandner, seemingly readily accepting their conclusions.

The same topographical map was adapted by Corso and Romano in 2003 (see Figure 7.3).¹² In this case, the palace's location, among other features, is outlined as more 'definite'. While Corso and Romano do not explicitly tell us that the features are 'certain', the question marks [?] that Hoepfner and Schwandner include on their drawing are now gone and there is no questioning or discussion on the realities of imposing the grid in rugged, and indeed, topographically challenging terrain. A further topographic

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Figure 7.3 Halicarnassus

Source: Plan based on Corso and Romano 2003, p. 198. Amendments by Samantha L. Martin-McAuliffe.

map was generated by Knell in 1985¹³ (see Figure 7.4). This drawing, produced before Hoepfner and Schwandner, is more thorough, including details that appear closer to site actualities, following detailed site observations and a preliminary topographic survey. With the Knell topographic plan, we can see the main east – west roadway located on a natural terrace. Note that it is not quite as straight as outlined in the previously referenced topographic plans. More significant perhaps, is the grid itself: It is irregular. It in fact *hints* at following the slope of the terrain, axed towards the main bay. This is key: A significant portion of the ancient town grid appears to be

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Figure 7.4 Halicarnassus

Source: Plan based on Knell 1985, p. 60. Amendments by Samantha L. Martin-McAuliffe.

governed by the topography and not imposed as a north – south ‘lattice’. Partly corroborated by the present researcher’s initial survey findings where the arteries radiate away from the harbour, this brings the several plans and their interpretation into question. We know from urban planning research that without significant alterations, street orientation tends to remain in spite of centuries of resurfacing. What appears to have taken place at Halicarnassus, therefore, is the juxtapositioning of two grids: an orthogonal grid with several east-west roadways and a few north-south arteries, and a secondary grid aligned with the bowl-shaped topography.¹⁴ The latter may have pre-dated the former.

Three points sum up this first portion of the argument: First, the natural site of Halicarnassus was clearly one that was privileged and defensible, providing opportunity for an urban setting that was readily adaptable for military and power-sustaining advantages. It is exemplary, with a topography that includes a combination of flat surfaces and terraces onto which were located specific monuments and roadways. The natural theatre-bowl shape, vantage points and high observation posts together offered possibilities for what would have been an urban apparatus that would have awed and inspired, especially as seen by visitors (or potential conquerors) approaching from the sea, all the while providing ways of overlooking defenses during times of tension. In effect, a ‘vertical plan’ was provided for the approaching viewer and a set of challenges was presented to the approaching enemy, in time providing a set of memorable urban planning cues to the *De architectura* writer and eventual reader.

Second, the grid of the ancient town has been outlined in the literature as regular, orthogonal and Hippodamian. In fact, there appears to have been a tendency towards regularizing the grid in the same literature by using Vitruvius’ very broad description as a form of authentication and ‘proof’. Site observations and basic satellite imagery interpreted within the present research initiative reveal what could be a very different governing grid emplaced upon the terrain. What seems more likely than a simple orthogonal grid is a set of two, superimposed grids: a broad orthogonal one, with, perhaps a only few north-south arteries, and a secondary grid, possibly pre-dating the first, radially aligned with the bowl shaped topography. This example shows that other more topographically adaptive planning models may very well have been in use at the time.

Third, Vitruvius gave definite prominence to Halicarnassus by making it his example of choice, particularly in terms of the settlement’s plan, its array of monuments and the aligning of vantage points within a set of impressive topographic features. He provided an example of a landscape of power, which would have undoubtedly given his readers an idealised townscape from which other settlement plans could have been derived.

Vitruvius and Halicarnassus

It is with the latter discussion on topography and the urban plan that we turn to more closely examine Vitruvius and his discussion of Halicarnassus. Presenting monuments in the way that he has obviously generated planning imagery (at least within *De architectura*’s collective readership imagination).¹⁵ However, there seems to be more at play: Could it be that Vitruvius was aware of the internalised architectural imagery of his readers on the one hand, and on the other, the powerful imaginative processes that persisted in the collective mind when presented with descriptive texts without actual visuals?¹⁶ He provided, after all, very few images with his text.¹⁷

It is well worth looking at another of Vitruvius' passages concerning Halicarnassus as he discussed how, after Mausolus' death, his wife Artemesia had successfully defended the city using its double port feature to her advantage against the Rhodians (II, 8, 11–12). Consider his description of the event:

Therefore when, after the death of Mausolus, his wife Artemisia began to reign, the Rhodians were indignant that a woman should rule over the cities throughout Caria, and equipping a fleet they set out to seize the kingdom. It was reported to Artemesia. She hid the fleet in the harbour, concealing the rowers and the marines she had got together, and ordered the rest of the citizens to man the walls. Now when the Rhodians had landed, with a fleet well equipped, in the greater harbour, she commanded the citizens to greet them from the walls and to promise to surrender the town. These left their ships unmanned and penetrated within the wall. Artemesia, using an artificial outlet into the sea, suddenly led out her fleet from the lesser harbour and thus sailed into the greater. She then landed her soldiers and took the empty Rhodian fleet away to sea. So the Rhodians, having no place to retreat, were surrounded and killed in the forum itself. So Artemesia, placing her own troops and rowers in the ships of the Rhodians sailed for Rhodes.¹⁸

Thus the double port was etched into the ancient planning imagination and eventually, planning history. Intentional or not, Vitruvius provided a story that would have served as a mnemonic to help the reader recall the site's features. Certainly Vitruvius was not far from the physical reality of the site and we have checked this with the above discussion of the topographical surveys. Consider a further example – his discussion of the town's main fountain:

The fountain, however, by a mistaken opinion, is thought to afflict with an aphrodisiac disease those who drink of it. And why this opinion has wandered over the world through mistaken rumour it will not be inconvenient to set forth. For this cannot be because, as it is said, people are made effeminate and shameless by that water; the virtue of the spring is clearness and its flavor is excellent. Now when Melas and Arevanias led thither a joint colony from Argos to Troezen, they cast out the barbarians, Carians and Leleges. But these being driven to the hills, gathered together and made raids, and by brigandage, they devastated the Greeks cruelly. But afterwards one of the colonists, for the sake of profit, fitted up an inn with complete supplies, near the spring, on account of the goodness of the water, and running the inn, he began to attract the barbarians. So coming down one by one, and mixing with society, they changed of their own accord from their rough and wild habits . . .¹⁹

A relatively simple story, but with a potent effect. I suggest that the narrative is a further mnemonic that enables the reader to remember the fountain's emplacement upon the urban grid. To ask the question then: How did the reader of Antiquity visualise this landscape from the words of Vitruvius alone? Well, the same way as the reader of today would: By 'imagining' or combining previous travel or imagery with the text to arrive at a new mental image of the site.²⁰ This in spite of the fact that the average reader of Antiquity most probably would not have been to Halicarnassus and would not necessarily have had access to pictorials depicting the site.

Given the latter, it is worth considering that mnemotechnics could have worked covertly: In addition to operating as a memory aid for the person wishing to remember, the description of Halicarnassus, and the stories within the same description, could be used by the writer to inscribe specific instructions.²¹ Thus just as textual, rhetorical *loci* could have reminded readers of what it was that they were supposed to remember, a set of monuments sited on a particular landscape could in the same way remind viewers of specific design strategies. Vitruvius would thus have been able to install precise memory cues within the mind of the reader. And much more importantly, the extent to which the latter would be permitted to enhance the cue could also be controlled. A fine depiction of a place, for example, could incise a memory track from which it would be very difficult to wander; a more generalised description could in turn allow the viewer to interpret the visual (or textual) more broadly and in turn fill it with the fragments and vignettes that inhabit the personal imaginary field.

While we know little of the Roman imagination (and there are dangers in projecting transfers from the textual to the imaginary as there is always a loss in the translation and therefore a risk of misalignment) the writer, I believe, could have been experimenting by modulating the extent to which the imagination was provoked by narrowing or widening the descriptive field.

In terms of images for his architectural examples, Vitruvius chose few Roman cases and deliberately included temporally and spatially distant Greek models, especially at Halicarnassus. The ambiguity created by turning to distant examples allowed for a broader imagining of his examples and indeed, his architectural and planning precepts: The reader would have retreated from the personal experience and reassembled an architecture based on the loose textual images of Halicarnassus. Throughout, Vitruvius provided mnemonics and easy ways of remembering his issues of priority all-the-while installing these within the readers' mind. As Vitruvius narrated myths, he amplified knowledge and rendered authority to his text. 'Newness' and 'mysteriousness' captivated the readers' attention and sense of wonder; the 'real' details of Halicarnassus provided 'proofs'.

With his text, Vitruvius presented a scenographic and defensive ensemble at Halicarnassus. The accuracy of his account, while more or less valid, may not have been the most important aspect of its inclusion within *De architectura*; it may have been the use of the depiction as a memory device to deliver planning instructions. The clever planning tenets delivered within a memorable descriptive text render a potent set of instructions. The reader at once connects 'bits' from within the collective and personal memories to the general textual description, filling in any gaps and linking these to whatever site is at hand, and plans accordingly.

And this very process, I would suggest, is what has allowed scholars and interpreters of *De architectura*, in this case, to allow themselves to regularise the grid in spite of site specificities.

Vitruvius, memory and 'centres of recollection'

The topography of Halicarnassus is one which is presented as memorable and exemplary by Vitruvius. The plan of the site, in spite of its challenges, reflects the privileged aspects of the topography. Several versions of the plan have emerged over time, often reflecting the plan by Hoepfner and Schwandner. Errors have been repeated and indeed, seemingly amplified and with perhaps an over-reliance on Vitruvius' text

in order to provide an authoritative argument. Detailed site inspections and preliminary topographic survey results highlight a slightly different grid plan, or plans, and confirm much of the plan by Knell. What appears to have been adopted by the Greek colonials as the governing lattice, is a set of two juxtaposed grids: An orthogonal one with several east-west roadways and a few north-south arteries, and a secondary grid aligned with the bowl-shaped topography.

The inclusion of Halicarnassus as a key example in *De architectura* would have had the effect of producing a 'centre of recollection', whereby powerful imaginative devices were employed to allow the reader to generate a very specific set of site planning cues.²² Terracing, monument siting and other features, dictated by Vitruvius through an evocative set of vignettes, made it such that the reader could visualise the emplacement of the grid plan. More recent interpreters of *De architectura* have persistently focused on regulating the site and correcting the physical evidence of the grid to 'fit' a contemporary reading of Vitruvius' words – a reading that has yet to take into account the collective memory and collective imagination of the readers of Vitruvius' day.

Notes

- 1 A preliminary draft of this research was presented at the *Society of Architectural Historians* Annual Conference in Detroit (April, 2012). I am grateful for the comments and encouragement of the session organisers, Diane Favro and Fikret Yegül, as well as session participants in clarifying my interpretation of the site. Several of my conclusions regarding the grid plan are based on my preliminary site survey undertaken in 2006 and 2011 and subsequent data analysis in 2015 and 2016.
- 2 Strabo made reference to the city in his Book XIV, 2, 16–17, as did Pliny, a bit later, in his *Historia Naturalis*, Book XXXVI, 47.
- 3 For a general site presentation and description of the mausoleum, see Jeppesen 2010. For an assessment of the site as it relates to Vitruvius' text, see J.-Fr. Bommelaer 1989, 22–6. See also Ludwig Ross 1854, 348–59.
- 4 *Vitruvius*, II, 8, x. All English translations are from F. Granger (trans.), *Vitruvius De Architectura* (Cambridge, MA: Harvard University Press, 1935).
- 5 *Vitruvius*, II, 8, ix.
- 6 *Ibid.*, xiii.
- 7 *Ibid.*, 8, xi.
- 8 Hoepfner and Schwandner 1994, 226–34.
- 9 Ingrid D. Rowland and Thomas Noble Howe. *Vitruvius: Ten Books on Architecture* (Cambridge: Cambridge University Press, 1999), 185.
- 10 The city wall was built at around 364 BC. It is seven kilometers in length and completely surrounded the city.
- 11 There are as many as five road segments that run north – south throughout the city's grid.
- 12 Granger, *Vitruvio De Architectura*, 198.
- 13 Knell 1985, 60.
- 14 For more on radiating streets as grid elements, see the still relevant R.E. Wycherly 1962.
- 15 Indeed: Whether Vitruvius actually visited the site is questionable. He may have been relying on secondary sources, or perhaps, his interpretation of an oral description of the same place. See K. Jeppesen, "Did Vitruvius Ever Visit Halicarnassus?" *Anatolia* 22 (1981–83): 85–98.
- 16 The Mausoleum, for example, was already well known as one of the seven wonders of the ancient world. For a reconstruction drawing, see Lawrence (1957) 1983, Figure 226, p. 253.
- 17 On images in *De architectura*, see Millette 2000, 18–27, 1998, 1–13.
- 18 *Vitruvius*, Book II, 8, xiv–xv.
- 19 *Ibid.*, xii.
- 20 On the representation of space within rhetoric, see Leach 1988.

- 21 On memory, mnemonics and mnemotechnics, see Francis Yates 1966 and Mary Carruthers 1998.
- 22 A 'centre of recollection' to me, is a central, regional place operating as a recollective node that establishes a direct connection between a place removed from the centre of power, and the centre of power itself. Thus, in addition to operating as a landscape of power, it confirms for the viewer (or the reader), through place sensation and other facets, that the same landscape has authority, in this case, in terms of urban design ideals. Further, it enables the non-viewer, a person far removed in either space or time, who might be reading about the same place, to fill in any gaps that the descriptive text may contain, by way of imaginative processes: Stories, vignettes and so on, are all employed to this end.

Bibliography

- Bommelaer, J.-Fr. 1989. "Sur les rapports de Vitruve avec la science De son temps: questions De topographie et De géographie." In H. Geertman and J.J. de Jong (eds.), *Munus non ingratum. Proceedings of the international Symposium on Vitruvius' De architectura and the Hellenistic and Republican Architecture*, Leiden 20–3 January, 1987, 22–6. Leiden: Babesch.
- Carruthers, M. 1998. *The Craft of Thought*. Cambridge: Cambridge University Press.
- Corso, A., and E. Romano. 2003. *Vitruvio – De architectura*. Torino: Giulio Einaudi editore.
- Hoepfner, W., and E-L. Schwandner. 1994. *Haus und Stadt im klassischen Griechenland*. Munich: Neuauflage.
- Jeppesen, K. 1981–3. "Did Vitruvius Ever Visit Halicarnassus?" *Anatolia* 22: 85–98.
- Jeppesen, K. 2010. *The Mausoleion at Ancient Halicarnassus*. Ankara: Dönmez Offset Basimevi.
- Knell, H. 1985. *Vitruvs Architekturtheorie*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Lawrence, A.W. 1957, 1983. *Greek Architecture*. New Haven, CT and London: Yale University Press.
- Leach, E.W. 1988. *The Rhetoric of Space. Literary and Artistic Representations of Landscape in Republican and Augustan Rome*. Princeton, NJ: Princeton University Press.
- Millette, D.M. 1998. "Textual Imaginations: Vitruvius in Archaeological Reconstruction". *Assemblage – Sheffield Journal of Archaeology* 3: 1–13. Sheffield: University of Sheffield School of Archaeology.
- Millette, D.M. 2000. "On Illustrating the Oldest Architectural Book: Sketches and Mnemonics in the *De Architectura Libri Decem*". *Journal of the Society for the Study of Architecture in Canada* 24, no. 4: 18–27.
- Ross, L. 1854. "On the Topography of Halicarnassus, With Guichard and Dalechamp's Account of the Final Destruction of the Mausoleum." *Journal of Classical and Sacred Philology* 1: 348–59.
- Vitruvius Pollio, M. 1935. *On Architecture* (F. Granger, trans.). Cambridge, MA: Harvard University Press.
- Vitruvius Pollio, M. 1999. *Vitruvius: Ten Books of Architecture*, New ed. (I.D. Rowland, trans., T.N. How (commentary), and M. Dewar (illustrations). New York: Cambridge University Press.
- Wyche, R.E. 1962. *How the Greeks Built Cities – the Relationship of Architecture and Town Planning to Everyday Life in Ancient Greece*. New York and London: W. W. Norton and Company.
- Yates, F.A. 1966. *The Art of Memory*. Chicago: University of Chicago Press.

8 Razed or raised?

Echoes of the Punic city in Roman Carthage

Jessica Ambler

Introduction

The Roman rebuilding of Carthage in the Augustan period is often read as an act of imperial hegemony: an opportunity for Augustus to cast his influence over an historic foe and assert Roman dominance anew.¹ Raising Carthage, a notorious enemy, from the ashes would certainly have cemented both Augustus's position as Caesar's successor and demonstrated his ability to achieve projects that had been tried and failed by others. However, while Carthage was re-created under the auspices of Augustus, its new incarnation drew on the imprint left from the Punic site itself. The survival of the Punic foundations allowed the city to act as a place of cultural continuity where changing power relationships were mediated.² As the new city became filled with buildings and monuments, its public spaces could be read by inhabitants and visitors in reference to the memory of Punic Carthage and all it stood for in Rome's collective consciousness.

The rebuilding of Carthage, moreover, was also an extension of the Augustan cultural and architectural project underway in Rome. That project was driven by a conscious desire on the part of Augustus to represent himself as merely Rome's first citizen while also the son of a god. This was achieved by Vergil's *Aeneid* (written in the late first century BC), which constructed a cultural history of Rome, personally tied to Augustus, based on selectively chosen myths and memories. The *Aeneid* chronicled Aeneas's wanderings after the Trojan War and his eventual founding of Alba Longa; it also underscored the divine descent the Julio-Claudian family claimed from Aeneas through his son Ascanius or Iulus. Furthermore, the epic helped to provide the historical background and divine sanction for Augustus's current projects by firmly establishing him as the inheritor of the grand tradition of Carthaginian urbanism and empire, as told in the poem.

In this chapter I argue that the Roman rebuilding of Carthage borrowed heavily on the Punic past and actively incorporated elements of the earlier city into the fabric of *Colonia Concordia Iulia Karthago* (the Roman name for Carthage). My argument is based on an examination of the continuity of the orthogonal plan in the coastal neighbourhood, the reuse of Punic building materials and techniques in Augustan edifices, and the survival of the Byrsa Hill as the ceremonial focal point of the city. I also examine two Augustan altars, one from Carthage, the other from Rome, both of which were visually and thematically linked by reliefs showing crucial scenes from the *Aeneid*. This evidence, taken together, demonstrates that the Punic city was an entrenched part of the Roman manifestation of Carthage. The founding of *Colonia Concordia* was part of a larger Augustan cultural project that linked the two cities.

Architectural Concord: building Augustan Carthage

In spite of the city's destruction in 146 BC at the conclusion of the Third Punic War, Carthage retained its notoriety as Rome's one-time contender for rule of the Mediterranean. So why would Augustus rebuild a city that had taken the Romans three bloody wars, over the course of centuries, to destroy? And why did Augustus rebuild it in such a grand manner? He did so because Carthage offered the Romans advantages both tangible and ideological. By rebuilding Carthage, Augustus could connect himself with an ancient and beautiful city, which had been dominant in the western Mediterranean centuries before Rome while also connecting himself to Aeneas, his divine forefather, who had first helped to build Carthage.

The decision to rebuild Carthage certainly seems surprising given that the Roman province of North Africa already had a territorial capital in the city of Utica (a prior Punic city that had sided with the Romans during the Third Punic War). The Romans, then, did not need Carthage to be rebuilt in a monumental fashion to serve administrative purposes. Yet this is precisely what occurred during the Augustan period. Carthage thus presented a unique opportunity for Augustus and his city planners to promote certain agendas, from the practical to the ideological. As a physical locale, Carthage was ideally situated near the sea, with excellent harbours, and the land itself provided essentially a *tabula rasa* from which to build. Ideologically, however, the soil of Carthage was anything but untouched. After Carthage was destroyed, the city was remembered by a collective audience in Rome through triumphal processions, paintings and texts. These representations portrayed Carthage's history as one of past greatness and lost ambition. For Augustus, Rome was to succeed Carthage as the Mediterranean's great power.

The new Carthage relied on the old for its urban organisation. Much like Punic Carthage, the heart of the city was still the Byrsa Hill, which had been the monumental centre of the earlier city. While in Punic Carthage the street plans fluctuated organically according to terrain, arranged on a radiating pattern of the slopes on the Byrsa and in a strict orthogonal pattern in the neighbourhood parallel to the shore, the Romans chose to adopt the more strict orthogonal pattern for their city. The Roman rebuilding reproduced the broad spatial configuration of the Punic city but it also extended the orthogonal street plan from the harbour area to cover all of *Colonia Concordia*. The Roman city was divided into four quarters by the main streets, the *cardo maximus* and *decumanus maximus*, and in each quadrant a monumental public building framed the outer edge of the city; the theatre, amphitheatre, circus and the *platea maritima*, an extended colonnade running along the sea wall.³ Although not all of these structures appear to have been built in the Augustan period, spaces for them were allotted in the urban grid. The Romans may even have built temporary precursors to the later permanent buildings.⁴

The orthogonal plan of the city was directly inherited from the earlier Punic neighbourhood situated on the coastal plain. The late Punic city's streets had run parallel to the shore. They had gradually and loosely transitioned to a fan-shaped division of the Byrsa Hill, with neighbourhoods organised on individual grid systems. In the Roman city, the coastal orientation was emphatically applied to the entire urban area.⁵ Although the varied orientations of the Punic plan were now lost in the Roman rebuilding, the reuse of the seaside orientation ensured a continuity of the earlier city's existence. This continuity demonstrated that the Romans deliberately chose those elements of the city that were to be maintained and which memories were to be kept

in some instances, or altogether eliminated. The new Carthage was not exclusively Roman in its orientation. The use of the rectangular city block dimensions was common in Punic Carthage. While these city blocks were re-used in the Roman city they were rarely employed in other Roman cities. And, some of the buildings along the coast continued to reflect the earlier alignments of Punic buildings.⁶

Much as the layout of the old city survived in the new one, so the very materials of its making were recycled. Archaeologists commonly find in the remains of Augustan-period foundation walls charred stones. These were charred in the burning of the city in 146 BC. They demonstrate that *Colonia Concordia* was built to a great extent with recycled Punic stone.⁷ Romans arguably had little choice but to make use of local building materials. Carthage is not located near a good source of stone, and the stone used in the majority of buildings in the city had to be transported by sea from the quarries on Cape Bon or the sandstone deposits near Korbous on the opposite side of the bay.⁸ The re-use of stone was a practical and economic exercise on the part of the Roman builders. It also had the effect of working physical Punic remains into the fabric of the Roman city.

The Punic buildings on the Byrsa Hill were typically built of thin walls within the buildings, comprised of mud-brick masonry set upon small stone masonry for the foundation. The walls that divided the buildings are commonly made up of *opus mixtum* or *opus Africanum* set in frames of large ashlar around a masonry of smaller stones (see Figure 8.1). The walls comprising the exteriors of the blocks are built from



Figure 8.1 Remains of Roman-era buildings on the Byrsa Hill

Source: Photograph taken by author, image in the public domain.

large dressed blocks of sandstone, usually one Punic cubit thick (0.52 m).⁹ The builders of the Augustan city not only reused Punic stones for their buildings, but they also adopted Punic building techniques. These included the late Punic *opus Africanum* that is often seen used in buildings of this period in Carthage.¹⁰ This stone working technique exists side-by-side with the central Italian *opus reticulatum*, a previously unknown technique in North Africa. As such, Roman and local builders were likely working together to create an integrated, innovative style of construction in the new capital city.¹¹ The Roman planners also made continued use of Punic cisterns and drains, attesting to another level of practical considerations in the architectural and urban continuity of Carthage.¹²

While the neighbourhood of the coastal plain and the related orthogonal street grid represent a relatively undisturbed continuity of Punic presence in *Colonia Concordia*, the Augustan transformation of the Byrsa Hill, from steeply sloped Punic ceremonial centre to leveled Roman forum, is indicative of more complex architectural connections between the two versions of Carthage. The re-use of the Byrsa as a ritual city centre did not displace the existence of the Punic Byrsa even though the physical changes made to the space were significant. Rather, the enduring use of the Byrsa as a monumental space in the city was a visual sign of cultural and architectural continuity. Recent archaeological missions have confirmed the story of Punic Carthage's urban renewal, which was begun in the early second century BC, following the Second Punic War. Prior to this urban renewal of the slopes of the Byrsa Hill, when the region was turned into a residential neighbourhood, the same land had been used for two other purposes since the Archaic period.¹³ Archaeological reports attest to the south slopes of the Byrsa serving the function of a burial ground beginning in the seventh century BC, with at least twenty-eight graves found.¹⁴ Given the sacred nature of the funerary zone, the area remained untouched throughout the sixth and fifth centuries.¹⁵ Sometime in the fourth century BC, however, the sector transitioned into an industrial zone, becoming populated with metallurgical workshops, and functioned as such throughout part of the third century as well.

Pierre Gros calls the Byrsa Hill the *locus celeberrimus* of Carthage, the focal point of the new Roman city where both the orientation for the city was set and the important buildings were located.¹⁶ In order to build an imposing plateau for a monumental urban centre, the Augustan planners leveled the top of the Byrsa, a marvelous engineering feat that required at least 100,000 cubic meters of earth to be moved down the slopes of the hill.¹⁷ The next step in the creation of the plateau was the inclusion of semicircular retaining walls and vaulting that acted as structural barriers, pushing against the thrust of the deposited soil.¹⁸ Once these were achieved a rectangular platform replaced the summit of the original hill. This orthogonal space was orientated according to the axes retained for the street layout of the new town.¹⁹ The resulting Augustan plaza was extremely large, measuring approximately 30,000 m².²⁰ As Serge Lancel argues, for Roman city planners, such a large, flat and regularly planned space lent itself best to the erection of a monumental city centre (see Figure 8.2).²¹ Lancel goes on to claim that the building of the Augustan platform on the Byrsa "offered the advantage of erasing a symbol, that of the focal point of the Punic city's power and its relentless resistance."²² Another interpretation can be made. By embracing the Byrsa Hill as the central focal point of the Roman city, the planners maintained an important Punic visual and historical place in Carthage as their monumental city centre. This reference would not have been lost on those who knew the history of Carthage.



Figure 8.2 The Roman Forum on top of the Byrsa Hill

Source: Photograph taken by author, image in the public domain.

In his evaluation of Augustan Carthage, Friedrich Rakob argues that the “Roman re-organisation of the Byrsa did not incorporate the Punic citadel, but abolished it, leveling down to virgin soil for the construction of a new city centre. In the spirit of the Roman vow, all traces of Punic construction in that space were definitively extinguished.”²³ While the deliberate erasure of memories (and their physical traces) is just as telling as the preservation of others, what should be emphasised here is the fact that the Roman city centre was built in the same topographically conspicuous space as the Punic city’s centre. The Punic Byrsa was allowed to live on through the significant Roman choice of site for a monumental forum. Rather than erasing all physical memory of Punic urban existence on the site, this act allowed for cultural continuity through architecture, as did the re-use of building materials.

The major building project undertaken by Augustan builders to construct the plateau on the Byrsa Hill for a ceremonial forum was not inherently convenient or economical. It required both a great amount of earth moving and vaulting as well as a significant step away from standard Roman city planning practice. In a typical Roman town the main concentration of monumental buildings would be in the commercial forum. In *Colonia Concordia*, this would have likely taken the place of the Punic city’s commercial agora in the lower city between the harbours and below the Byrsa.²⁴ In the case of *Colonia Concordia Iulia Karthago*, the Punic model utilised the highest topographical point in the city, the Byrsa, as a ceremonial structural centre, thereby

providing an opportunity for the Roman city planners to adapt an existing space in the very heart of the city.

A tale of two altars: Vergil, Aeneas and Carthage

Roman Carthage was built around its *genius loci*, or spirit of place. This spirit was bolstered by centuries of Roman representations and memory of the Punic city and its people. These representations and memories lived within Rome as stories and images. They constantly reminded the Roman populace of the earlier version of Carthage. Punic Carthage was a monumental capital city in the western Mediterranean long before Rome began to pave her streets. The Carthaginians colonised, traded and flourished as a culture for centuries before Rome began to challenge the Punic city for its position as *caput mundi* (or head of the Mediterranean world). In the age of Augustus, Carthage was restored to her position on the North African coastline as a great city once again, the capital of the province, but one that was now subject to Rome. When Augustus undertook this project, he built a city informed by and embodying the spirit of Carthage that had been evolving in Roman memory for centuries. Roman Carthage was at once a monumental capital city, lined with wide orthogonal streets and graced with a monumental forum atop the Byrsa, reminiscent of its Punic predecessor as well as a manifestation of an ideal Roman capital city, generating strong parallels to Augustan Rome.

Clear parallels between the two manifestations of Carthage were also drawn in Vergil's *Aeneid* via the link between Augustus and his predecessor Aeneas. This link established what Iris Aravot calls an "a posteriori" urban foundation myth for the city.²⁵ By making explicit the connection between Aeneas and Augustus, Vergil conflated the two cities, Punic Carthage and Roman Carthage, in the public imagination. He also helped to establish a mode of connecting the Roman collective memory of Carthage, developed before the time of Augustus, with the current rebuilding of the city.

The *Aeneid* is a Roman epic modeled on the Homeric epics. It centres on the hero Aeneas, son of the goddess Venus, who leaves a destroyed Troy to spend years wandering the Mediterranean in search of a place where he could found a new homeland. During that journey, Aeneas stops at Carthage where he meets the legendary queen Dido. He aids her in constructing her city until the gods warn him that he must continue on to build his own city in Italy. This story was subsequently adopted by Romans. Since the Julio-Claudians traced their lineage to Venus through Aeneas, the Augustan rebuilding of Carthage was the logical conclusion of Aeneas's legendary urban ambitions which had been left unfinished.

The Carthaginian foundation myth expounded in the *Aeneid* also helped to relate crucial imagery in the Augustan visual repertoire, such as the ubiquitous appearance of Aeneas on Augustan monuments.²⁶ The image of Aeneas figured prominently not only in the Forum Augustum but it also connected two altars dedicated to Augustus, the Ara Pacis in Rome and the Gens Augusta Altar in Carthage.²⁷ Although separated by distance, the altars are closely linked in their visual programmes, demonstrating how "Rome's first emperor did not hesitate to weave myth, legend, and current events into a dramatic narrative of Rome's illustrious past, promising present, and visionary destiny."²⁸ The Ara Pacis, although commissioned by the Senate rather than Augustus, still reflected the stylistic and iconographic trends prevalent at the time. The entrance to the altar is flanked by two pictorial relief panels, the image to the left depicting the

she-wolf with Romulus and Remus and the image to the right portraying Aeneas.²⁹ The relief of Aeneas shows the pious hero after he has arrived in Italy and discovered the white sow and her litter, which were prophesied to mark the location of the city he was destined to build (see Figure 8.3).³⁰ The site, on the banks of the Tiber, was to include a temple dedicated to the Penates, or household gods that Aeneas had brought with him on the long journey from Troy. In the scene a cloaked Aeneas pours the libation at a simple stone altar while attendants stand to the left, ready with the sow to be sacrificed. On the right is the partially preserved figure of Aeneas's son Ascanius, wearing Trojan dress and carrying a shepherd's staff, although he is depicted as a youth, not a young child. In the relief, Aeneas is performing the sacrifice below a small marble temple in the upper left corner of the scene that holds the Penates brought with so much care to Italy.³¹ The entire scene is anchored by a centrally placed oak tree, denoting not only topographical location but also as a symbol of Aeneas's fate being fulfilled.³²

The Gens Augusta altar, found on the Byrsa Hill in Carthage in 1916, is attributed to the patronage of a freedman named P. Perelius Hedulus. The attribution is based on a nearby inscription naming him as *sacerdos perpetuus*.³³ The imagery on the altar is closely related to the programme featured on the Ara Pacis in Rome, leading scholars to date the Carthaginian altar sometime after 13 BC.³⁴ The Gens Augusta altar, while smaller and less refined in style than the Ara Pacis, demonstrates an awareness on the



Figure 8.3 Detail of Aeneas relief from the Ara Pacis, Roma, Museo dell'Ara Pacis Augustae
Source: Photograph taken by author.

part of the artist of the earlier, more famous relief panels in Rome. It recreates the visual experience for a colonial audience.³⁵ The Gens Augusta altar has a relief panel on each of its four sides, one featuring a personification of Rome much like that of the figure on the Ara Pacis, another depicting Hedulus performing a sacrifice, reminiscent of Augustus and Aeneas sacrificing in the Ara Pacis reliefs, and a third side depicting Apollo, another protector deity of Augustus.³⁶ And the fourth side of the altar features a panel once again starring Aeneas.

The fourth side's panel, unlike the image on the Ara Pacis that depicts the culmination of his journey, here recounts Aeneas's famous flight from Troy (see Figure 8.4).³⁷ The figure of Aeneas is at the centre of the relief and he is carrying his father Anchises on his shoulder while Anchises clutches a basket containing the Penates. Aeneas pulls his son Ascanius or Iulus by the hand as the figures rush toward the right of the scene, as emphasised by the billowing of Ascanius's cape. The entire figural composition is paralleled and framed by an oak tree located on the left side of the image. The tree was meant to symbolise the forests of Mt. Ida near Troy. It also linked the action to the peaceful sacrifice scene under an oak on the Ara Pacis.³⁸

The Gens Augusta altar should not be seen as a poor colonial copy of earlier imagery on the Ara Pacis. Rather, the connection between the two Augustan altars runs deeper than simple visual parallels.³⁹ While the artist responsible for the Carthaginian altar was undeniably influenced by the themes and imagery featured on the altar

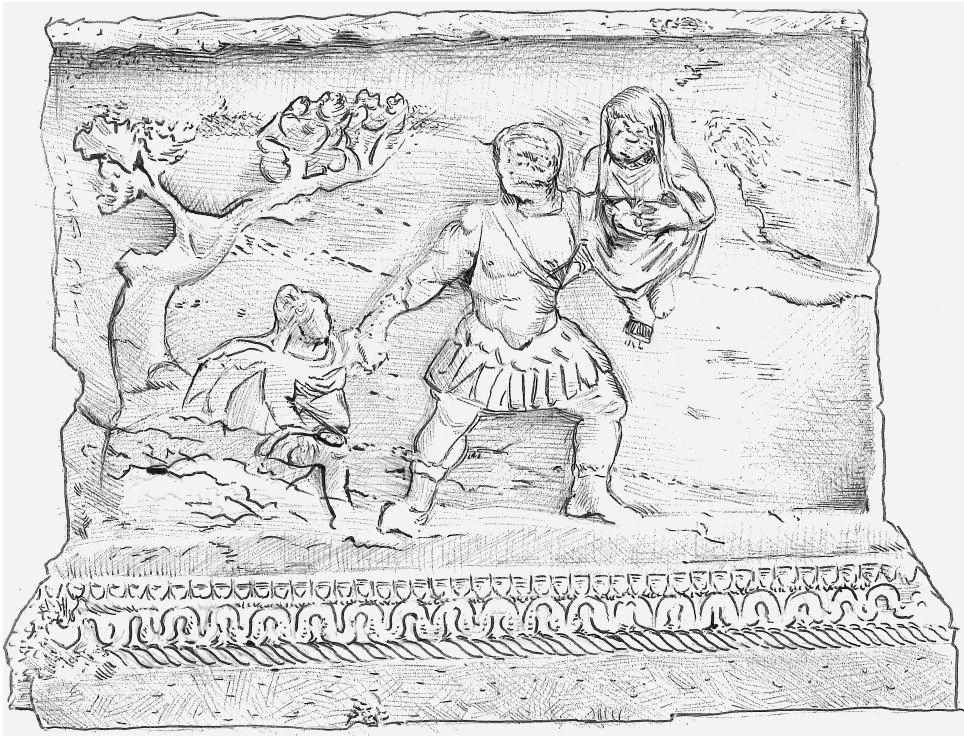


Figure 8.4 Line drawing of the Aeneas relief from the Gens Augusta altar, Bardo Museum, Tunis
Source: The author.

in Rome, he advanced the narrative while linking the two altars in a more meaningful way through the relief of Aeneas. On the Ara Pacis, the viewer will find “the pious *pater Aeneas* who has endured a thousand trials.”⁴⁰ The relief depicts a culmination of Aeneas’s journey and a fulfillment of earlier prophesies. The pious hero has arrived in Italy at long last and is dutifully making sacrifice in the proper location. This scene is appropriate for inclusion on an Augustan building in Rome because it locates the narrative in Italy and it tells of the completion of the myth. Just as Aeneas makes sacrifice and sets about founding temples in the new home of the Trojans, so does his descendant, Augustus, continue the task, remaking Rome through architectural renewal. In contrast, the relief of Aeneas on the altar in Carthage depicts the hero at the beginning of his journey, and being on the move instead of already being settled. Rather than repeat the Ara Pacis scene, the artist has chosen to depict a point in the story where Aeneas has left Troy and is making his way towards Italy, a scene that was appropriate for a Carthaginian audience since Carthage was an important stop along his way to his final destination. By choosing this point in the story, anticipating the arrival of Aeneas in Carthage, the artist connected the altar visually to the Ara Pacis in Rome while creating a visual narrative extending the story over multiple continents.

Carthage raised

As urban historian Diane Favro has demonstrated in relation to Augustan Rome, the urban image of a city is in part “formed when diverse components define an urban focus perceived as affiliated. Though the buildings may be from different periods, cohesion is achieved through visual, experiential, and/or functional homogeneity.”⁴¹ This is indeed the situation in *Colonia Concordia Iulia Karthago*. The Roman manifestation of the city, built as a reflection of the Augustan urban image of Rome, incorporated a multitude of elements of its Punic pasts in the fabric of the rebuilt city. Many of the physical elements of *Colonia Concordia* harkened back to the Punic city, down to the reuse of Carthaginian stones in Augustan buildings. The combined use of Punic and Roman building techniques speaks to a new city built by a hybrid workforce, creating a place of cultural contact and dialogue, allowing Punic elements to live on while the Roman city grew. While the builders of *Colonia Concordia* made extensive use of the Punic past of the city, they also forged strong connections to the Augustan building projects in Rome and the larger Augustan cultural project. In doing so, they made manifest in the North African capital city what could not be achieved architecturally in the heart of Rome.

Colonia Concordia represents an example of the type of cohesive planning and monumental building that Augustus was unable to achieve in the heart of his own capital city due to the existence of earlier monuments. Carthage presented Augustus and his builders with a physical site open to receive unified organisation and building while at the same time offering connections to a long and distinguished history, with clear parallels to Rome. The ties between Carthage and Rome were further enhanced in the Augustan cultural project by poets such as Vergil. The *Aeneid* made clear the connections between Carthage and Rome by placing Augustus’s mythic ancestor Aeneas in the Punic city at the time of its foundation by Dido. Augustus, as the inheritor of Aeneas’s legacy, left his imprint not only on the urban fabric of Rome but also completed the task begun by his ancestor by rebuilding Carthage. In the age of Augustus, Carthage was once again restored to her position on the North African coastline

as a great city, the capital of the province, that while subject to Rome, was nonetheless a city that retained the memories of its glorious past.

Notes

- 1 R. Miles, *Carthage Must Be Destroyed: The Rise and Fall of an Ancient Civilization* (London: Allen Lane, 2010), 364; F. Rakob, "The Making of Augustan Carthage," in *Romanization and the City: Creation, Transformations, and Failures: Proceedings of a Conference Held at the American Academy in Rome to Celebrate the 50th Anniversary of the Excavations at Cosa, 14–16 May, 1998*, ed. E. Fentress (Journal of Roman Archaeology Supplementary Series 38; Portsmouth, 2000), 82; E.M. Wightman, "The Plan of Roman Carthage: Practicalities and Politics," in *New Light on Ancient Carthage: Papers of a Symposium*, ed. J.G. Pedley (Ann Arbor, MI: The University of Michigan Press, 1980), 40–1; S. Lancel, *Carthage: A History* (Oxford: Blackwell, 1995), 430.
- 2 E.S. Wolper, *Cities and Saints: Sufism and the Transformation of Urban Space in Medieval Anatolia* (University Park, PA: Pennsylvania State University Press, 2003), 95.
- 3 Rakob, "The Making of Augustan Carthage," 75.
- 4 Ibid., 73–82.
- 5 Ibid., 76; Wightman, "The Plan of Roman Carthage: Practicalities and Politics," 38.
- 6 Rakob, "The Making of Augustan Carthage," 77. In contrast to typical Roman *insulae* proportions those at Carthage have a ratio of 1:4. Wightman, "The Plan of Roman Carthage: Practicalities and Politics," 38.
- 7 Ibid.
- 8 Ibid.
- 9 S. Lancel, G. Robine, and J-P. Thuillier, "Town Planning and Domestic Architecture of the Early Second Century B.C. on the Byrsa, Carthage," in *New Light on Ancient Carthage: Papers of a Symposium*, 19.
- 10 Rakob, "The Making of Augustan Carthage," 80.
- 11 Ibid.
- 12 Ibid.
- 13 S. Lancel, "Fouilles Françaises À Carthage: La Colline De Byrsa Et L'occupation Punique (VI^e Siècle-146 Av. J.-C.)," *Comptes Rendus de L'Académie des Inscriptions* 125, no. 2 (1981) : 156–193.
- 14 Ibid., 158.
- 15 Ibid., 165.
- 16 Gros, "Le Premier Urbanisme De La Colonia Julia Karthago-Mythes Et Realites D'une Fondation Cesaro-Augusteenne," 550.
- 17 Lancel, *Carthage: A History*, 151.
- 18 Ibid.
- 19 Ibid.
- 20 Rakob, "The Making of Augustan Carthage," 78.
- 21 Lancel, *Carthage: A History*, 430.
- 22 Ibid.
- 23 Rakob, "The Making of Augustan Carthage," 78.
- 24 P. Gros, "Le Premier Urbanisme De La Colonia Julia Karthago-Mythes Et Realites D'une Fondation Cesaro-Augusteenne," in *L'Afrique dans l'Occident romain (1^{er} siècle av. J.-C.). Actes du colloque de Rome (3–5 décembre 1987)* (Collection de l'École française de Rome 134; Rome, 1990), 565. Gros also argues that a commercial forum existed on the flat plain near the ports for the practical reason that, like the streets of the Punic Byrsa, those of the Roman city leading up the hill were extremely steep and took the form of staircases in some places, allowing only for pedestrian traffic, not the vehicular traffic one would expect in a busy commercial zone.
- 25 I. Aravot, "Narrative-Myth and Urban Design," *Journal of Architectural Education* 49, no. 2 (1995): 81.
- 26 A. Barchiesi, "Learned Eyes: Poets, Viewers, Image Makers," in *The Cambridge Companion to the Age of Augustus*, ed. K. Galinsky (New York: Cambridge University Press, 2005), 282.

- 27 The most complete description of the Gens Augusta altar (and the only monograph on the work) is: L. Poinssot, *L'autel De La Gens Augusta À Carthage* (Paris: Vuibert, 1929).
- 28 D.E.E. Kleiner, "Semblance and Storytelling in Augustan Rome," in *The Cambridge Companion to the Age of Augustus*, 219.
- 29 P. Zanker, *The Power of Images in the Age of Augustus* (Ann Arbor, MI: University of Michigan Press, 1990), 203.
- 30 " . . . beside the waters of a secret stream, along the banks beneath the branching ilex, a huge white sow stretched on the ground together with a new-delivered litter of thirty suckling white pigs at her teats, that place will be the site set for your city . . ." *Aen.*3.506–11, A. Mandelbaum (trans.), *The Aeneid of Virgil* (New York: Bantam Books, 1981), 70. "But then a wonderful, a sudden sign: within the wood, along the green shore, lay a white sow, just as white as her white litter; at this pious Aeneas offers up to you, most mighty Juno, even to you the sow and all her young before your altar." *Aen.*8.105–10, Mandelbaum, *The Aeneid of Virgil*, 194.
- 31 Zanker, *The Power of Images in the Age of Augustus*, 204.
- 32 *Ibid.*, 205.
- 33 P. MacKendrick, *The North African Stones Speak* (Chapel Hill, NC: University of North Carolina Press: 1980), 46–8; Zanker, *The Power of Images in the Age of Augustus*, 315; J.B. Rives, *Religion and Authority in Roman Carthage from Augustus to Constantine* (New York: Oxford University Press, 1995), 55–7.
- 34 MacKendrick, *The North African Stones Speak*, 46.
- 35 Zanker, *The Power of Images in the Age of Augustus*, 315.
- 36 J. Scheid, "Augustus and Roman Religion: Continuity, Conservatism, and Innovation," in *The Cambridge Companion to the Age of Augustus*, 178–9. Some scholars believe that the sacrificing figure in the scene is Augustus rather than Hedulius, a reading that would further link the altar to the Ara Pacis. MacKendrick, *The North African Stones Speak*, 48.
- 37 "This said, I spread a tawny lion skin across my bent back, over my broad shoulders, and then take up Anchises; small Iulus now clutches my right hand; his steps uneven, he is following his father . . ." *Aen.*2.974–8, Mandelbaum, *The Aeneid of Virgil*, 53.
- 38 The oak tree also has a bull's skull in its fork, linking it to the *buchrania* prevalent on the Ara Pacis. MacKendrick, *The North African Stones Speak*, 48.
- 39 Zanker, *The Power of Images in the Age of Augustus*, 315.
- 40 *Ibid.*, 204.
- 41 D. Favro, *The Urban Image of Augustan Rome* (New York: Cambridge University Press: 1996), 168.

Bibliography

- Aravot, I. 1995. "Narrative-Myth and Urban Design." *Journal of Architectural Education* 49, no. 2: 79–91.
- Favro, D. 1996. *The Urban Image of Augustan Rome*. New York: Cambridge University Press.
- Fentress, E. (ed.) 2000. "Romanization and the City: Creation Transformations and Failures." In *Proceedings of a Conference Held at the American Academy in Rome to Celebrate the 50th Anniversary of the Excavations at Cosa, 14–16 May, 1998*, *Journal of Roman Archaeology* Supplementary Series 38. Portsmouth.
- Galinsky, K. (ed.) 2005. *The Cambridge Companion to the Age of Augustus*. New York: Cambridge University Press.
- École française de Rome. 1990. *L'Afrique dans l'Occident romain (1er siècle av. J.-C.)*. Actes du colloque de Rome (3–5 décembre 1987). Rome: Collection de l'École française de Rome 134.
- Lancel, S. 1981. "Fouilles Françaises À Carthage: La Colline De Byrsa Et L'occupation Punique (Viie Siècle-146 Av. J.-C.)", *Comptes Rendus de L'Académie des Inscriptions* 2.
- Lancel, S. 1995. *Carthage: A History*. Oxford: Blackwell.
- MacKendrick, P. 1980. *The North African Stones Speak*. Chapel Hill, NC: University of North Carolina Press.

- Mandelbaum, A. (trans.) 1981. *The Aeneid of Virgil*. New York: Bantam Books.
- Miles, R. 2010. *Carthage Must Be Destroyed: The Rise and Fall of an Ancient Civilization*. London: Allen Lane.
- Pedley, J.G. (ed.) 1980. *New Light on Ancient Carthage: Papers of a Symposium*. Ann Arbor, MI: The University of Michigan Press.
- Poinssot, L. 1929. *L'autel De La Gens Augusta À Carthage*. Paris: Vuibert.
- Rives, J.B. 1995. *Religion and Authority in Roman Carthage from Augustus to Constantine*. New York: Oxford University Press.
- Wolper, E.S. 2003. *Cities and Saints: Sufism and the Transformation of Urban Space in Medieval Anatolia*. University Park, PA: Pennsylvania State University Press.
- Zanker, P. 1990. *The Power of Images in the Age of Augustus*. Ann Arbor, MI: University of Michigan Press.

9 Triumph, power and providence in Roman town planning

The golden age of Flavian Rome

Flavia Marcello

Flavia gens, quantum tibi tertius abstulit heres!

Paene fuit tanti, non habuisse duos.¹

Introduction

In the last four decades of the first century AD, Rome witnessed an unprecedented transformation of the urban fabric, its radicalism and power of propaganda only matched, arguably, some two thousand years later during the Fascist period (1922–1943). Unlike Augustus before them, the Flavian emperors – Vespasian, Titus and Domitian – did not turn Rome from brick to marble. Instead they transformed a city led by the “cruel and bloodthirsty”² Nero, torn apart by civil war and ravaged by the fires of 64, 69 and 80, into the very image of triumph, power, providence and the return of a golden age.³ The new and reconstructed monuments and urban spaces of Flavian Rome acted as nodes of literal and figurative representation. These nodes were carefully overlaid and integrated with the city’s Augustan image and employed vistas and paths between these symbolic nodes to communicate a new, unitary concept of the city. The combined effects of despotic rule, civil war and fire had taken their toll on the city image and the Flavians needed to show that a deserving new dynasty had brought back the order and peace of their worthy predecessor through displays of triumph, power and providence.

The Flavians placed carefully re-programmed, restored and added new monuments within the urban fabric. The movements and vistas between them highlighted their legibility and political impact with the aim of communicating a precise ideological programme through a constructed image of the city. This chapter builds on primary literary descriptions and the most recent interpretations of Flavian Rome and integrates the methodology used by Diane Favro for Augustan Rome based on the theories of Kevin Lynch to form a complex city image formed by the intersection and interplay between five urban elements: districts, nodes, landmark edges and paths.⁴ The text uses a series of reconstructed maps of first-century Rome to argue for the development of an overall vision of the Flavian city that allows the ideological and urban programme of the Flavian emperors to be seen in a new light.⁵ The maps focus on the city’s four principal districts and like all maps of a past cityscape, they are a combination of archaeological evidence, literary description, logic, conjecture and sometimes, pure guesswork. Given that the author is not a trained archaeologist, it is hoped that the last aspect is minimal

and that the contribution to scholarship is in the level of urban analysis so that new directions in the understanding of ancient plans and how they continue to have an influence on contemporary urban experiences can be made available.

Administratively, first-century Rome was divided into 14 *regiones*, but as far as the daily movements and activities of the civic population were concerned, its central area was made up of four main perceptual districts: the north-western Campus Martius (Augustan *regio* IX), the north-eastern Suburra (Augustan *regiones* IV and VI), the central Forum and Palatine (Augustan *regiones* VIII and X) and a principally undeveloped area towards the south-east (Augustan *regiones* I, II and III).

Districts were medium to large sections of the city that varied in size according to citizens' perceptions.⁶ During the Republican period, the definition of districts depended largely on topography but by the end of Augustus's reign the landmarks defining them shifted from the natural to the man-made monumental.⁷ The Flavian plan for Rome naturally focussed on these districts for both political and pragmatic reasons: connecting to geographic position, existing monuments, military exploits and the coincidence of disaster. They added to the religious, civic and social functions of each district by rebuilding and restoring existing monuments and harnessing both negative and positive associations to their own ends. Alongside the work of both

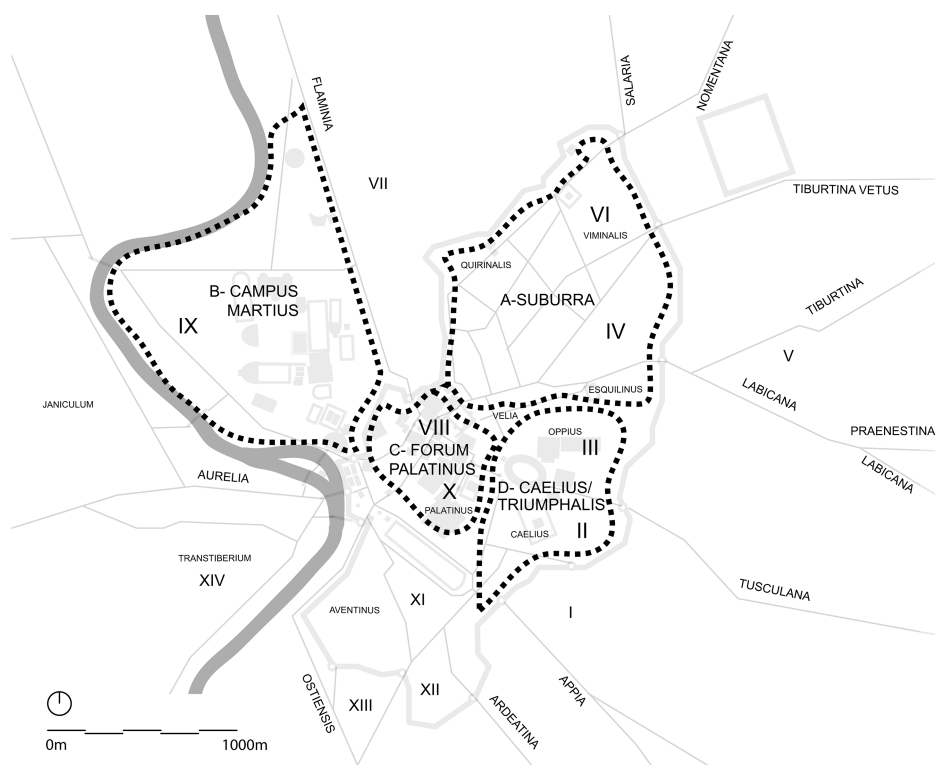


Figure 9.1 Districts of Flavian Rome: Campus Martius, Suburra, Central Forum, Caelius/Triumphalis

Source: Author 2014.

worthy and unworthy predecessors they built new monuments along existing paths that either created new civic nodes or completed existing ones. These nodes were strategic spots in a city that acted as intensive foci to and from the various points of travel. As a result, existing narratives of the city – such as that of a past Augustan glory laid waste – were re-constructed and overlaid with new narratives of a present and future Flavian glory based on its resurrected legacy.

The concentration of civic, political and religious buildings in the central Forum area not only marked the climax of the triumphal parades, it also maintained the single-minded order of the establishment of the Julio-Claudian reign, alongside the residence of the emperor on the Palatine. The Suburra, which spread across the Quirinal, Viminal and Esquiline Hills, was still quite densely populated despite the destruction of the 64 AD fire,⁸ and contained numerous paths leading down to the central Forum area both for city dwellers and for visitors arriving from the north-east. It also contained a number of previously nondescript *loci* that were brought into relief by civil war events and the origins of the *gens Flavia*. The Campus Martius was a significant district for visitors arriving from the main northern artery, the Via Flaminia. Augustus had already harnessed this fact to construct his own city image and this idea of a civic narrative was emulated by the Flavians for the approach from the south along the Via Appia.⁹ The area was historically linked with military life as the gathering place for the start of the triumphal parade and its Augustan brand of civic monumentality happened to be in dire need of repair after the 80 AD fire. Finally, the area between the Oppian and Caelian Hills was transformed into a splendid forecourt to the city's monumental, civic and religious heart for visitors arriving from the main southern artery, the Via Appia. It brought focus onto the central section of the triumphal route as it turned left out of the Circus Maximus, allowing for uninterrupted views of the Palatine and revolving around the *Amphitheatrum Flavium*, more commonly known as the Colosseum: built, significantly, on the site of Nero's extravagant Domus Aurea.

The nature of Flavian Rome: the city and its emperors

Existing studies of Flavian Rome combine the archaeological with the literary to give a picture of specific monuments and their particular meaning within an overall ideological programme.¹⁰ This focus on individual buildings, though valuable, leaves room in the scholarship to enrich and contextualise this picture with a broader and more accessible urban image that engages with their location and context within the urban fabric and considers movements, paths and vistas between them. As Diane Favro has pointed out in relation to Augustan Rome, the legibility of monuments as perceived through vistas and paths in the urban fabric was essential to convey a monument's political message as an element of a coherent whole.¹¹ The cityscape functioned like an experiential stage-set where movement through it communicated an overarching narrative. Like Augustus before them, the Flavians were well aware of the importance of an experiential underpinning to urban design in order to achieve the most effective perceptual impact.¹² Romans interacted with monuments in their daily lives. They acted as landmarks that shaped their perspective and image of the city as they altered and defined paths, acted as meeting points (or created nodes) and shaped the city's topographical identity.¹³ In fact, monument and landmark are two semi-interchangeable terms since a landmark can form a node when a monument and the civic space in front of it form a significant urban element.¹⁴ The Flavian plan for Rome did not follow the

classic Roman grid pattern. Instead, it was a carefully constructed and considered set of nodes that connected, both visually and physically, paths across an equally considered network of lines.

The transformation of Rome under Flavian rule is considered through three principal phases, each driven by an over-riding rhetorical objective. James Packer has identified the reign of Vespasian as one concerned principally with politics; that of Titus is associated with pietas; and Domitian's rule is marked by providentia.¹⁵ The reputations of Nero and Caligula and the advent of civil war meant that Vespasian was faced with a city left "unsightly from fires and fallen buildings" and "he considered nothing more essential than first to strengthen the State, which was tottering and almost overthrown, and then to embellish it as well".¹⁶ He therefore concerned himself primarily with the restoration of public order and the creation of impressive venues for political life as shown, for example, in the swift reconstruction of the Temple of Jupiter Optimus Maximus and the beginning of works on the Templum Pacis (Temple of Peace) and the Colosseum. The short-lived second phase was concerned with conveying an idea of monumentalised piety through the concepts of wisdom, accomplishments and divinity allowed for by the uncontrollable events of the eruption of Vesuvius and the 80 fire, "calamities [where] he showed not merely the concern of an emperor, but even a father's surpassing love."¹⁷ This is exemplified by the provision of baths on the Oppian Hill and the completion of the Colosseum and the very generous and spectacular shows held for its inauguration for which Titus took full credit.¹⁸

The third phase was dominated by the need to express care for the physical, emotional and economic well-being of the populace. Parallel to this was a need on Domitian's part to demonstrate control over public space through the act of surveillance and how architecture was used to create, at the very least, an illusion of renewed social order.¹⁹ Of the three Flavians, Domitian was the one most conscious of the fact that for imperial power to exist, it needed the space to do so and he correspondingly set up a polarised model of spatial relations by placing his monuments and orchestrating movement between them. Another factor driving Domitian's urban programme focused on fixing the Flavian name and its new dynasty firmly into the minds of Roman citizens by setting up a series of parallels and juxtapositions between them and the Julio-Claudians, particularly through the use of religious architecture.²⁰ At the same time, he placed a personal focus on himself through his predilections for the Jupiter, Minerva and Egyptian cults whom he credited for his survival during the attacks of Vitellius and his soldiers.²¹

Finally, the strategy of construction, reconstruction and urban interventions put into place by the Flavians centred on a specific event of 71: the triumphal parade of Titus and Vespasian for which "not a soul among that countless host in the city was left at home."²² This was "the key dynastic moment where Julio-Claudian history stopped and Flavian history started."²³ Thus its path and the landmarks along it were key to making up the image (and reality) of the Flavian city and its atmosphere of triumph.

The Flavian city in Lynchian terms

The religious and civic monuments of the Flavian emperors were landmarks for their related open spaces, thus acting as a set of nodes within the city fabric connected by paths that allowed for movement and vistas between them.

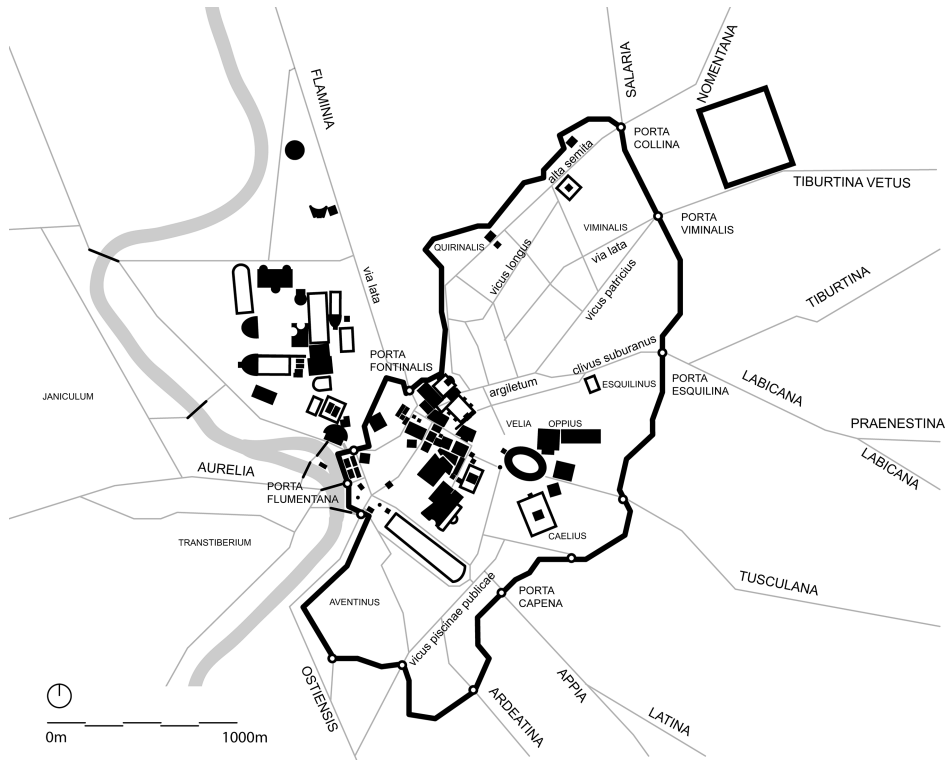


Figure 9.2 Reconstruction of the Servian Walls and principal nodes, paths and monuments of the Flavian city

Source: Author 2014.

New buildings were placed in strategic points for each district to create visual and physical lines to communicate imperial rule over public space while pre-existing buildings were, through their restoration and reconstruction, symbolically repurposed.²⁴ The links and vistas between the monuments also had a pragmatic aspect: citizens could move easily between, in and around the city's principal districts aided by long-distance views of the monuments as orientation devices. This sense of an urban whole was publically displayed to citizens and visitors to the city of Rome in a monumental marble plan: the so-called *Forma Urbis Romae* displayed in Vespasian's Templum Pacis complex.

The Flavians reconstructed and repurposed monuments to act as nodes and landmarks within each district to imprint their new form of rule and reinforce their narrative of triumph and resurrection of Augustus' golden age and each district tended to have its own identifiable set. Lynch also considers nodes to be junctions between roads, resting points or moments of shift and they can also simply be concentrations of activity that act as the core of a district and a dominating feature that can often coincide with a landmark.²⁵ Examples of civic nodes in the Flavian city were the piazza of the Forum or the new space created in the Campus Martius between the existing

portico of Pompey, the re-built Diribitorium and the new Circus of Domitian. The principal gates for the image of the Flavian city were the Porta Capena, the Porta Collina and the Porta Viminalis.²⁶ The Porta Capena met the Via Latina and the Via Appia, providing a route for travellers from the port of Brundisium, Pompeii and the Campania region. The Appia then met the Vicus Piscinae Publicae, which skirted along the Circus Maximus before leading onto the Via Triumphalis before turning left onto the famous Via Sacra and into the Forum.

Once within the city walls, another important node for the Flavian city was the point where the Vicus Patricius (from the Porta Viminalis) and the Clivus Suburanus (from the Porta Esquilina) merged into the Argiletum. At the beginning of the Flavian reign the Argiletum was basically a construction site due to the effects of the recent fire, an incomplete porticus begun by Nero and the recent completion of the Templum Pacis. In other words it was a decidedly unworthy route into the Forum.²⁷ It was later transformed by Domitian's architect Rabirius into the Forum Transitorium which acted as specific route or path, created a new landmark and formed a new focus of activity or nodes. Travellers from the north along the Via Flaminia could admire Augustan monuments both existing and reconstructed before proceeding along the Via Lata and into the Forum through the Porta Fontinalis. Although somewhat adjacent to the triumphal parade route, the Porta Flumentana was not, strictly speaking, an element of the Flavian city image. It was more a part of the everyday economic life of the city as it served travellers from the west along the Via Aurelia and daily traffic from the *horti* and the agricultural lands of Transtiberim (*regio* XIV) to the Forum Boarium via crossing points on the Tiber – principally the Pontes Aemilius, Caestius and Fabricius – that also operated as nodes.

Essential to the identity of nodes as urban space are landmarks, point references defined by Lynch as external physical objects. Whether distant or near, monumental or small scale their importance in the image of the city lies in their familiarity.²⁸ As Favro has explained, the citizens of Rome relied on landmarks as both locators and communicators of political messages and conveyors of propaganda. Romans of all social classes were experienced readers of non-verbal texts and the upper classes were trained to read the physical environment as a mnemonic device to remember long speeches and would thus read the urban environment of their daily lives in a similar way.²⁹ Parallel with his new landmarks and nodes, Augustus re-programmed existing Republican ones to ensure a purity of message.³⁰ His interventions within the city also served his policy of dynastic imprinting to ensure the continuity of the Julio-Claudian line.³¹ The Flavians learned much from these strategies and adopted them for both their pragmatic and symbolic values. Flavian landmarks added significantly to the urban landscape: the Colosseum and the *Equus* stood alone and commanded attention by their very presence in space. Conversely, the Arch of Titus, the stadium and the Temple of Vespasian and Titus commanded attention amongst the neighbouring house of the Vestals, the Baths of Nero and the Portico of the Harmonious Gods, respectively. Three great fires and a civil war within a period of fifteen years meant that many of the landmarks familiar to Romans who had become accustomed to the unitary splendor of Augustan Rome had been destroyed. The re-building and restoration of these was therefore a sensitive issue. This process had to be undertaken in a way that respected both the status of the object and its patron but at the same time made a statement about the nature of the new rule. An exemplary landmark included in this process was the Temple of Jupiter Optimus Maximus, which was rebuilt in 69 by Vespasian, who,

to show his humble (Augustus-like) qualities, helped move the rubble of the old building himself; Domitian restored the temple again following the 80 fire.³²

Paths connected these districts, nodes and landmarks. Lynch defines these as essential elements of the city image defined, for the most part, by edges. Edges are linear elements not considered paths that act as lateral references rather than co-ordinates (like landmarks) for orienting one's movement about the city.³³ First-century Rome presented a number of different types of edges: topographical elements such as hills and ridges, the Tiber (which served at the same time as a path), the Servian Walls (and adjacent *pomerium*), the dense 80 foot-high walls of apartment blocks, long thin buildings such as the Circus Maximus and the overground tracts of its principal aqueducts. Then there were unseen but socially understood edges. These were sacred spaces like the Aedes Vestae and its adjacent house for the Vestal Virgins or spaces reserved for different social classes (senators, *equites* etc.) like the Curia or the different seating tiers of the Colosseum. Then there were spaces that could only be entered with express permission from the emperor; for Domitian this became the entire Palatine Hill.³⁴ These edges sometimes determined the nature of a path. Examples include the dense fabric of insulae and tabernae that lined the Argiletum, or the Servian Walls and the Tiber, which both acted as barriers but which also were penetrable at the location of nodes, such as city gates and bridges. Augustus' unitary approach meant that

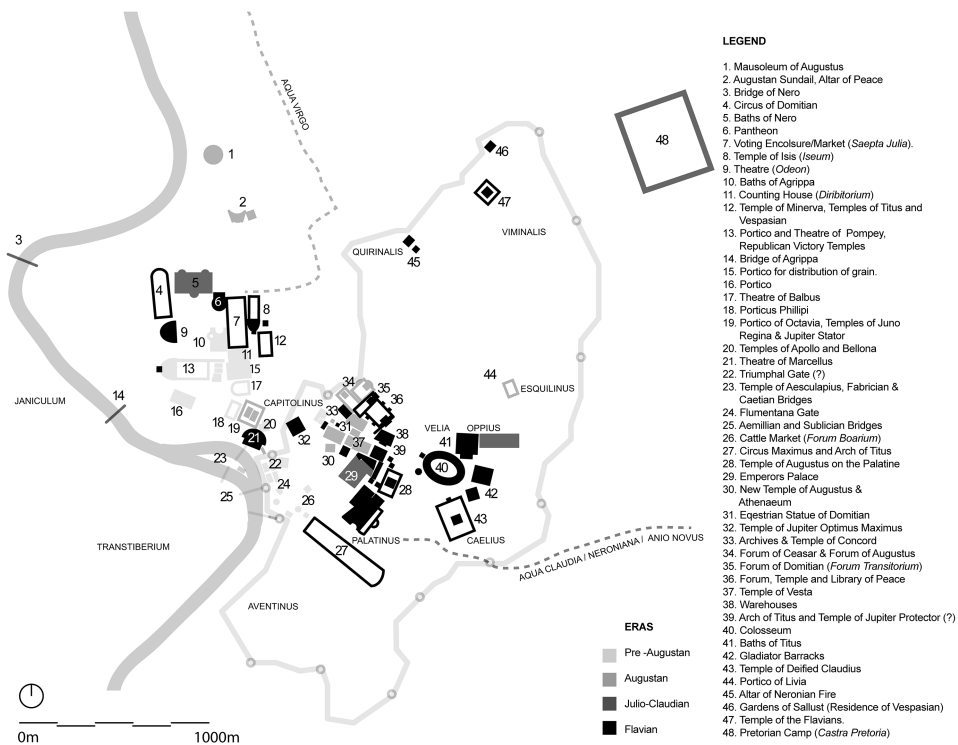


Figure 9.3 Map of Flavian Rome showing landmarks by era

Source: Author 2014.

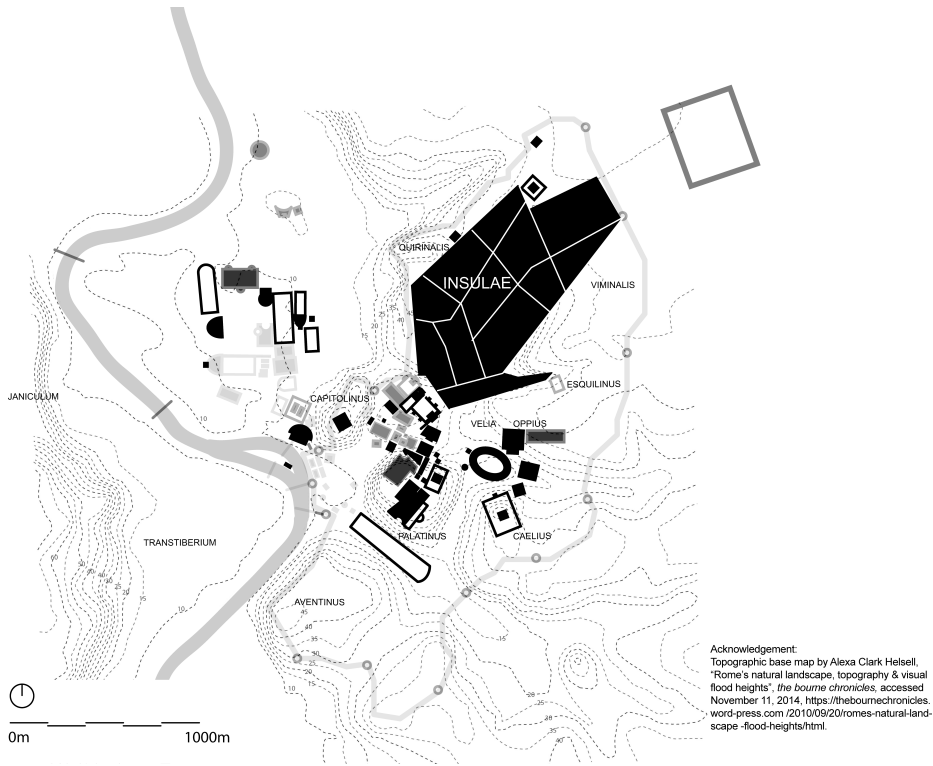


Figure 9.4 Edges of first-century Rome

Source: Author 2014.

rather than emphasise these edges, he placed focus on monuments and gates that indicated their permeability along certain paths.³⁵ The Flavians adopted a similar strategy.

Paths constitute the dominant element of a city image as it is observed and perceived via the act of moving through it. Along these channels there are customary, occasional, or potential movements, and they take form as roads or canals.³⁶ Ancient rhetoricians drew on strong associations between environments and narratives so it can be assumed that citizens were predisposed towards physical, visual and mental images of nodes, landmarks and districts as they moved along paths.³⁷ For the first-century Romans these paths were travelled primarily on foot although carts were sometimes used to move goods and the emperors often moved through the city either on horseback or by chariot.³⁸ These paths were of three main types: the principal (or consular) *vie* that led from the surrounding countryside or other regional centres; the various *vici* or *clivi*, most of which led, in some way or other, to the Forum; and ceremonial paths and routes such as those taken by priests during religious rituals. The most important of these for the Flavian city was the ceremonial route of the *triumphatores* that ran like a red thread through all the major districts of the first-century city. This was used as a

permanent narrative of the legitimacy of Flavian rule. Suetonius reported that Domitian “erected so many and such huge vaulted passageways and arches in the various regions of the city, adorned with chariots and triumphal emblems, that on one of them someone wrote in Greek: ‘[*Arci*] It is enough!’.”³⁹ These paths, however, were not just facilitators of movement. They were very important for the direction of views and vistas between landmarks to increase the all important legibility of Flavian monuments and their over-arching narrative.⁴⁰

Therefore nodes, landmarks, paths and edges worked together both within and across the city’s various districts and together formed a unified image that the citizens could read and understand as a narrative of Flavian power, providence and triumph that in turn brought back a Golden Age. I now turn to examine each district in detail to understand how this process came about: first, the Campus Martius with its Augustan stamp that had to be strategically and sensitively re-built after the 80 fire; next, the central Forum area where the Flavian imprint was stronger and more emphatic and acted as a climax after the subtle narrative of Flavian interventions dotted through the Suburra; finally, the creation of a new identifiably Flavian district to the south whose principal political statement was to overlay public splendor over private decadence as a forecourt to the monumental heart of the city.

Restoration and re-ordering: Flavian interventions in the Campus Martius

The Campus Martius is identifiably the district of Augustus. Together with his son-in-law Agrippa he transformed this flat and largely swampy area nestled into the bend of the Tiber, previously populated with temples and used for military training, into an important political and civic centre and an integral part of the city despite its location outside of the Servian Walls.⁴¹ The placing of Augustus’ Mausoleum, Ara Pacis and Horologium at the city’s northernmost edge meant that visitors arriving from the north already had harbingers of what was to come; it was ‘branded’ Augustan before they had even entered the urban fabric.⁴² This strategy of setting up a number of ‘prologues’ to the ‘main event’ of a narrative would later be employed by Domitian along the Alta Semita. After this first group of honorary monuments came a more defined civic centre: a nucleus of civic, political and religious buildings centred around the Pantheon and the *Stagnum Agrippae* which concentrated the waters of the low-lying lands. This allowed for more construction and at the same time provided a pleasant garden and artificial lake. Fed by a new aqueduct, this area quickly became an alternative civic node to the central Forum area: the Baths of Agrippa and Circus Flaminius (for leisure), the Saepta Julia and Diribitorium (for voting) and other areas for political activities. The southern portion of the Campus also boasted victory temples, numerous porticoes (Minucia, Pompei, Philippi) and theatres (Pompei, Balbi, Marcellus).

The area had already gained symbolic connections with the Flavians as this was where both the army and *triumphatores* spent the night before their parade in 71 AD.⁴³ The route began in the Campus Martius, passed through each of the theatres in order to give an opportunity to maximise the parade view and then passed through a gate in the Servian walls next to the Forum Boarium. The parade then proceeded through the Circus Maximus and made a left along the Via Triumphalis in the valley between the Caelian and Palatine Hills. From there it turned left once again and made

its way along the Via Sacra on the north-eastern edge of the Forum before turning left once more to climb the *Clivus Capitolinus* and reach the *Temple of Jupiter Optimus Maximus* to pay homage to the greatest of gods and his companions who looked after the fate of Rome: Minerva and Juno.⁴⁴

The triumphal parade was not just a civic spectacle to communicate victory and conquest.⁴⁵ The one held by the Flavians was unprecedented in that both Vespasian and Titus rode their *quadrigas* as *imperatores* with Domitian following on horseback to convey a strong new dynastic image.⁴⁶ It was a large-scale civic event that collapsed the boundary between representation and reality where spectators formed a living edge to the path of the triumphal route. They saw the victorious campaign against the rebellious Judeans played out before them as if they had actually been there.⁴⁷ By putting on display the fruits of conquest within a theatricalised urban space, the Empire itself was literally brought to Rome and the concept of empire with its triumphant leaders was naturalised through this act.⁴⁸ The presence of such a spectacle in the minds and memories of first-century Romans cannot be underestimated; it is thus plausible, in the rhetorical tradition mentioned earlier, that its permanence could be assured through the placement of key landmarks and nodes along the route including the many triumphal arches built by Domitian. As will also be seen in the following section, such reminders were established at key points within the urban fabric to cement the concept of the Flavians as not merely successful usurpers but also as an established imperial dynasty.⁴⁹

The northern area of the Campus was largely untouched by the fire of 80 AD and Domitian only made small improvements to the Mausoleum by raising the paving in front and placing two obelisks on either side of its entry to signify the placement of his father's ashes inside and seemingly anticipate the opening of its own accord just before Vespasian's death.⁵⁰ This move was part of the stratagem of dynastic imprinting that was at the origin of the Mausoleum itself. Furthermore, it was an act that connected the Flavians to the Julio-Claudians as worthy successors. Titus had already begun a more pragmatic reconstruction in that area starting with the Claudian aqueduct.⁵¹ Domitian's approach had a more political drive behind it. The level of destruction wrought by the fire was such that Dio Cassius thought it to be "not of human but of divine origin".⁵² However, the innumerable buildings destroyed in the central portion of the Campus presented an opportunity to redevelop the area entirely. Domitian was able to reflect his position as *dominus et deus* with a dual focus of providing for the leisure needs of the people and affirming his divine connections with Minerva, Egyptian deities and the revered Flavians from whom he claimed descentance.⁵³ Domitian was careful about what he reconstructed and where, strategically adding three new buildings. The first two were a circus and an odeum, which were more permanent versions of the wooden ones built by Augustus, Caligula and Nero. Together with heavily frequented public baths (Agrippae and Neronis) this shifted the function of this new civic node towards the social and the economical. Its previous identity as a political node had declined since the time of Caligula with the Saepta and the Diribitorium no longer in use for counting votes. Domitian re-built the former Republican voting enclosures and set them up as markets. He further emphasised this function by holding the *Agoni Capitolini* which also included musical contests.⁵⁴ Beyond this he added the Porticus Minucia Frumentaria to the Porticus Municia Vetus of the Republican period to show that the Flavians provided bread alongside their circuses.⁵⁵ These two buildings also created an edge that enclosed the fourth side of what became

a large, square piazza that was dedicated mostly to leisure activities and thus illustrated the general peace and enjoyment of the new golden era.

But the Campus was not just for leisure and entertainment. Implicit in the religious buildings was an ideological programme based on the divine and dynastic rule of the Flavians.⁵⁶ The Pantheon was built anew on top of Agrippa's foundations and Domitian also rebuilt the small temples dedicated to Isis and Serapis into a sumptuous and monumental complex of gardens, porticoes and statues. Next to this was the Divorum, a porticoed area enclosing a garden with two small temples dedicated to the cult of his father and brother. This was yet another move to vivify the memory of their triumphal parade, being close to the very spot where at dawn they "had issued forth, crowned with laurel and clad in the traditional purple robes" before proceeding to the Porticus of Octavia where the dignitaries awaited.⁵⁷ These symbolically mirrored the Temple of Vespasian and Titus that surveyed the area of the Forum from the slopes of the Capitoline Hill and connected visually across the valley to the Arch of Titus, Meta Sudans and Colosseum. Not to leave himself out, he built a small round temple to Minerva Chalcidicae. This was placed between the two structures connected to his father and brother as a gesture to his protecting goddess and to connect to the temple built for her in the Forum Transitorium, his most significant intervention within the central Forum area⁵⁸ (see Figure 9.5).

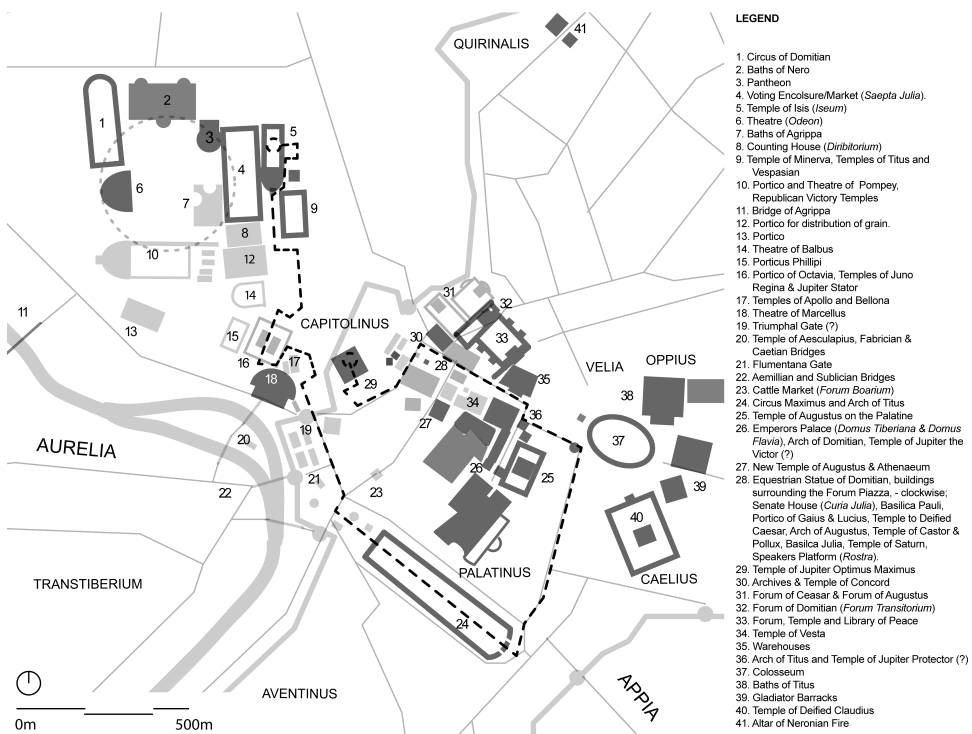


Figure 9.5 Reconstructed map of triumphal route

Source: Author 2014.

Restoration and relayering: Flavian interventions in the Forum

Like the Campus Martius, the central Forum area also bore the unmistakable stamp of the Julio-Claudians with the Rostra facing the Temple of the Deified Julius Caesar along the piazza's short ends and the Basilica Julia facing the Curia and Portico of Gaius and Lucius on the longer sides. Here, the matter of overlaying the Flavian dynasty onto the Julio-Claudian was more delicate than in the Campus; here Domitian turned the tables completely.⁵⁹

Rome's central district was dominated by the monumental forums of Julius Caesar and Augustus to which Vespasian had added his Templum Pacis, built in 75 to signify that the "empire of the Romans was established on the firmest foundation".⁶⁰ Built *ex manubiis* on the foundations of a former *macellum* destroyed in the 64 fire, Vespasian's new node and landmark would stand proudly, yet separately, alongside the *Forum of Augustus* and at same time would commemorate the victory over Judea. The complex was comprised of an almost square open space with rows of garden beds planted with exotic vegetation from around the Empire. It was surrounded by porticoes and tabernae.⁶¹ It served a number of cultural, religious and administrative functions, including the distribution of rations; it held a library, a hall for auditions, and displayed a map of the city – the *Forma Urbis Romae* – in a dedicated room to the

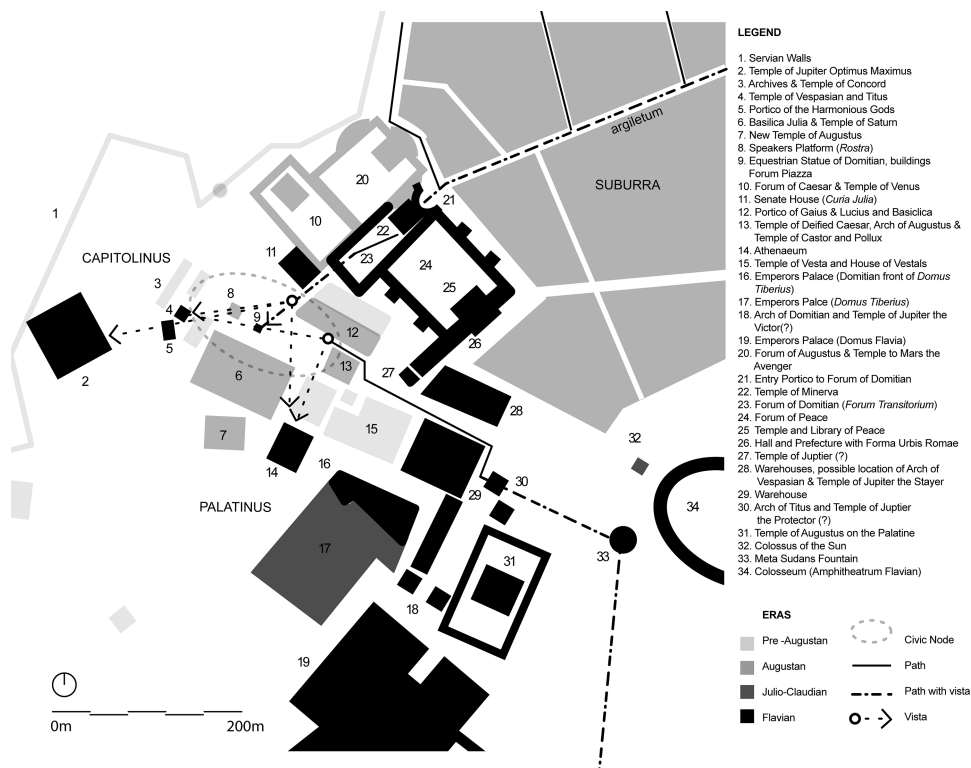


Figure 9.6 Detail map of central Forum district showing location of landmarks, nodes, paths and vistas

Source: Author 2014.

left of the temple. The Temple to Pax, which according to Coarelli gave an ideological tinge to what was essentially a civic building, was incorporated into the centre of a south-western portico and made tripartite references to other important buildings.⁶² In size and layout, either to the recently restored Jupiter Capitolinus or to the Temple of Mars Ultor; in concept and strategy to the Ara Pacis Augustae; and in a more symbolic fashion to the Temple of Jerusalem that he himself laid to waste.⁶³ Harnessing both the positive and the negative reputations of the Julio-Claudians, Vespasian made sure to display publicly the precious works of art that Nero had previously kept to himself alongside his own spoils that reiterated his own narrative of triumph.⁶⁴

Domitian was adamant that his own forum stand amongst them and so he created the Forum Transitorium around and over the Argiletum, the principal path that led from the Suburra to the forum through the remaining gap between the Forum of Augustus and the Templum Pacis. The Forum Transitorium acted on a tripartite level as node, path and landmark to become the most influential element in the construction of an image of the Flavian city. Its immediate importance is made evident by Martial who reports on Sextus's desired fame amongst the "three forums", implying that Domitian's is the third after those of Caesar (as recently restored by him) and of Augustus.⁶⁵ But still that was not enough as we know that upon his death Domitian had already begun work on a forum of unprecedented size that would later become the Forum of Trajan.⁶⁶

With this overall network of paths in mind, Domitian began the construction of a series of nodes and landmarks to honour the Flavian line via a network of paths through to the Forum from the north. The first landmark that signalled arrival into Rome for travellers from the northeast either along the Via Salaria from the Sabine Hills and the Adriatic Coast or the Via Nomentana, was the large military encampment built by Tiberius between 20 and 23. Visible from quite a distance, the Castra Pretoria was the first chapter in a constructed urban narrative as it was known in recent history as the place where Vespasian took power after Vitellius and his troops had taken refuge there.⁶⁷ Once through the Porta Collina, observers walked the Alta Semita, an essential channel that flanked the Servian Wall and collected residents of the Suburra to bring them to the Forum.

The next 'chapter' of the civic narrative is the Templum Gentis Flaviae that was built on Domitian's birthplace, the home of his uncle Titus Flavius Sabinus. Most scholars agree that this is almost certainly located between the octagonal hall of the later Baths of Diocletian and the Church of San Bernardo.⁶⁸ Proceeding along the Alta Semita at its intersection with the Vicus Mamurii, travellers and citizens were presented with a porticoed structure measuring approximately 403 by 272 feet.⁶⁹ This carried out the same function for travellers along the Via Nomentana and Via Salaria as the Mausoleum of Augustus did for travellers along the Via Flaminia: it announced the rule of the Nomen Flavium over the rest of the city.⁷⁰ The actual temple building would have stood inside the enclosure, but little is known about it other than it competed in size with the Temple of Jupiter Optimus Maximus, perhaps having been circular in plan.⁷¹ Domitian consciously followed the patterns set up by the Julio-Claudians in order to impose the traditions of a single family to define state ideology.⁷² The Templum was completed around the time of Domitian's death at which point the ashes of Vespasian, Titus and Julia Titi had already been transferred there, effectively transforming what was previously a temple to the Flavian cult into a mausoleum, thus diverging from the Augustan approach which had kept the two functions quite separate.⁷³ This was done to assist in Domitian's deification and in a bid to establish

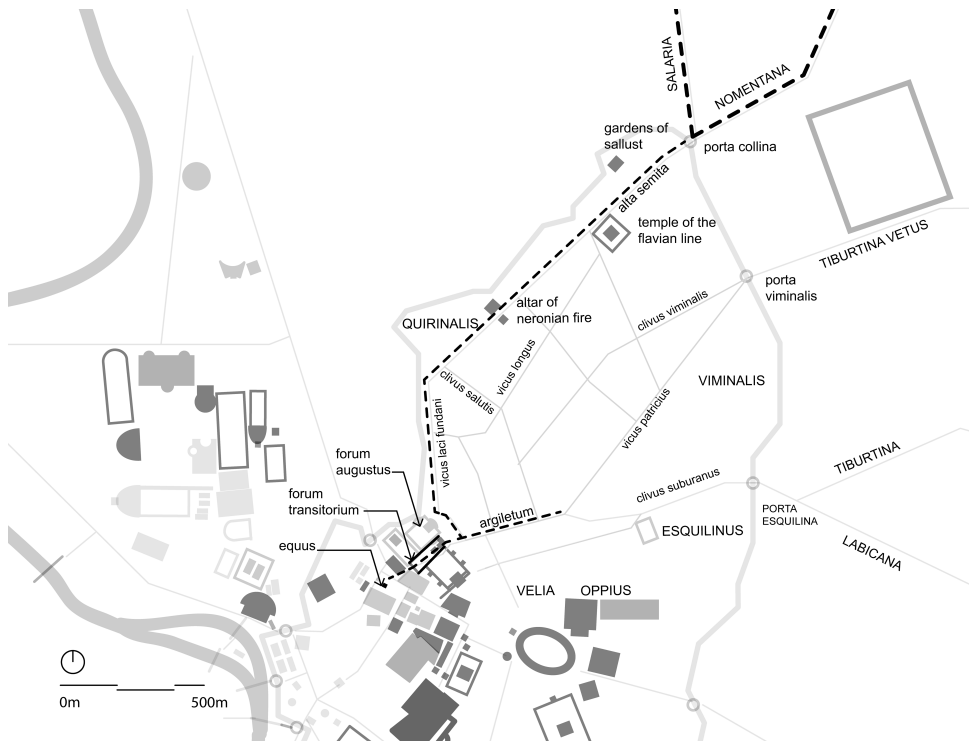


Figure 9.7 Map of Flavian narrative paths from Suburra to Forum Romanum via the Forum Transitorium

Source: Author 2014.

a dynastic ideology beyond his death that could stand independently of the former parallels with the previous Julio-Claudians.⁷⁴

Past the *Templum*, the walk amongst the domus, apartments and workhouses of the Suburra continued with testimonies and memories associated with the style and benevolence of Flavian rule: a nymphaeum for public use nestled along the Servian Walls; the *Arae Incendii Neroniani*, altars that marked the limit of the fire of 64; the Gardens of Sallust where Vespasian resided; and the site of the bloody battles of 69 from which the Flavians emerged victorious.⁷⁵ After roughly half a mile of these ‘vignettes’, the *Alta Semita* approached the Servian Wall and kinked towards the left along the *Vicus Laci Fundani* to flow onto the *Argiletum*. Whether city dwellers chose alternative paths from the *Alta Semita* or lived in a *domus* on the outskirts of the Oppian or Caelian Hills; whether travellers came from towns like Tuscum or Tibur or the numerous *horti* around *regio V*, they all eventually converged onto the *Argiletum*.⁷⁶ Once on this principal path all were greeted by the ‘prologue’ to the ‘main event’ of the Flavian narrative. A new node in the form of an apsidal porticus of *pavonazzetto* columns (to match those of the *Templum Pacis*) now masked the previous entry into the central Forum via the Forum of Augustus.⁷⁷ Before its construction, the first views of monumental public space for anyone heading into the Forum along the *Argiletum* would

have been the towering fire walls constructed in *peperino* and edged in white marble that were built by Augustus to protect his Forum. An arched opening to the left of the Temple of Mars Ultor led people into the main forum via the Forum Julium. Framing the Argiletum on the other side was the northern wall of Vespasian's Templum Pacis.

The tight space between the forums of the two 'fathers' presented a significant challenge to Domitian's architect, Rabirius.⁷⁸ At the same time, this constraint afforded an opportunity to subsume the Argiletum with a new node of public space that firmly connected the age of Flavian rule with the golden age of Augustus on



Figure 9.8 View down contemporary Via Baccina showing entry to Forum of Augustus

Source: Author 2014.



Figure 9.9a Reconstruction of Forum Transitorium

Source: Author 2014.



Figure 9.9b Reconstruction of Forum Transitorium

Source: Author 2014.



Figure 9.10 Coin (aureus) of Domitian, showing the *Equus Domitiani*, London, British Museum (1978, 1021.5)

Source: © The Trustees of the British Museum.

one hand, and Domitian as heir to his beloved father on the other, much in the same way that the path to the Forum Romanum via the Forum Julium did for Augustus. Travellers and citizens alike collected into the Porticus Absidata, and moved into a small, oddly-shaped atrium that directed views along the left hand portico of the Templum Pacis. From here they passed through a compressed space alongside the Aedes Minervae, which was marked by a triumphal arch.⁷⁹ The row of porphyry columns along the south-eastern wall abutting the Templum Pacis gave an impression of a colonnade, while relating geometrically to the piazza's proportions⁸⁰ as well as offering an axial view of the seated statue of *Pax*.

One then emerged into a widened space that was paved in white marble which extended lengthwise. Travelers crossed diagonally past the Temple of Janus before being spatially compressed under a portico and into the tight space between the *Basilica Aemilia/Porticus of Gaius and Lucius* and the Curia Julia, both buildings that Domitian had recently restored. The Forum Romanum, a space similar in size and proportion to that of the Forum Transitorium now opened up to the viewer.

This sequential narrative was reinforced by the placement of a new landmark in the middle of the Forum piazza amongst the aforementioned Julio-Claudian ones: the *Equus Domitiani*. This bronze statue, known only through literary description and coinage, is purported to have been almost three times taller than that of Marcus Aurelius and towered over the entire urban space (see Figure 9.10). It was tall enough to 'exchange glances' with the former Colossus of Nero that Vespasian had recently modified to resemble Sol, thus further reinforcing that link between imperial and divine power so important to Domitian.⁸¹ The left arm of Domitian's triumphal statue was raised in a gesture of peace while his right arm held a statue of the war goddess, Minerva, his personal favourite and his protector. His gaze looked over the Temple of the Deified Julius Caesar (Aedes Divi Iuli) towards the Aedes Vestae and beyond to the Colosseum. Under the horse's hoof was the personification of the River Rhine to illustrate the victory over the Germanic tribes described in the epigraph on the statue's base.⁸² Triumphal or equestrian statues were not automatically considered religious objects but the mode of its dedication made it equivalent to a shrine.⁸³ The statue thus reinforced the image of the Flavian city underpinned by the theme of triumph, while the poet Statius' description of the statue in the *Silvae* made continual

reference to the architecture of Julius Caesar and Augustus, thereby strengthening the links to the former golden age. Opinions about its exact position in the Forum piazza differ but for the Flavian narrative of this path to achieve its full effect, it would have made sense that it be placed on axis from the Argiletum⁸⁴ (see Figure 9.6 for a detailed map of the paths from Suburra to Forum Romanum via the Forum Transitorium).

The effect of these two nodes and their inter-relation was highly dependent on the positioning of two more new Flavian landmarks: the Arch of Titus at the summit of the Via Sacra and Temple of Vespasian and Titus along the flanks of the Capitoline. They jostled for attention with the magnificent Temple of Jupiter Optimus Maximus with its slender Pentelic marble columns, roof of gilded bronze and gold-plated doors and with the Curia Julia, both of which Domitian had recently restored.⁸⁵ The positioning of the Temple of Vespasian and Titus between identifiably Republican – era monuments upset the subtle balance set up by Augustus and is testimony to Domitian's heavy hand.⁸⁶ Its placement directly opposite the Temple of the Deified Julius Caesar set up a symmetrical relationship between Julius Caesar and Vespasian, both gods and both progenitors of the Julian and Flavian dynasties.⁸⁷ This was reinforced by the temple's decorative programme, which featured instruments of sacrifice and priestly attributes to confer dignity on the imperial cult and to emphasise the *pietas* of both father and brother.⁸⁸

The memorial/triumphal Arch of Titus marked the Flavian imprint on the Forum's eastern end and acted, literally, as a gateway between it and the new district being developed in the valley between the Caelian and the Palatine Hills. Of all the structures that spoke of triumph, this was the ultimate one. The world-famous *bas reliefs* on the inside of the arch immortalised both the event and Titus, whose apotheosis is depicted on a panel in the attic.⁸⁹ Passing under the arch, citizens were not only reminded of the pageant's multitude of spectacles and their magnificence that Josephus found "impossible to adequately describe";⁹⁰ they would also make a mental connection to other Flavian works connected with it. Firstly, the panels showed the "spoils borne in promiscuous heaps . . . captured from the Temple of Jerusalem"⁹¹ with the real things on public display in Vespasian's Templum Pacis. Secondly, the image of Titus being borne to the heavens by Jupiter in the form of an eagle connected both with the Temple of Vespasian and Titus at the other end of the Forum and with the Divorum in the Campus Martius where the parade began. Lastly, the position of the temple *in summa* (but not traversing) the Sacra Via was highly strategic.⁹² First, it acted as a gateway to the Domus Flavia as it had the effect of propelling the gaze up the Clivus Palatinus, under the Arch of Domitian whose *bas reliefs* likely focused on Domitian's role in the parade, and towards Domitian's palace.⁹³ Second, it was in direct alignment with the twice-restored *Temple of Jupiter Optimus Maximus*, thus providing a direct visual link to the procession's final destination and forever connecting the Flavian dynasty to Jupiter, to repeated triumph, to immortality.⁹⁴ Thirdly, as the Curia Julia formed a physical and symbolic node between the Roman Forum and the Forum Julium, so did the Arch of Titus form a connection between the city's original civic, political and religious heart and a new district taking shape under the Flavians (see Figure 9.6).

Splendour and transformation: the new Flavian district in the Caelian valley

The third district under discussion was edged by the Oppian, Palatine and Caelian Hills and included the Circus Maximus and stretched south towards the Via Appia (*regiones* I and XI). The district previously had a strong identity, through its

associations with the triumphal parade, and its new look would therefore make those associations even stronger (see Figure 9.5 for the triumphal route). Its northern portion was loosely associated with the extravagance of Nero, the last of the Julio-Claudians who, after the fire of 64, had appropriated large amounts of public land in order to build a grandiose villa in which he could “finally live like a human being”.⁹⁵ This, together with the Senate’s *damnatio memoriae*, meant that the district was essentially a clean slate where the efforts of Vespasian, Titus and Domitian would, like Augustus in the Campus Martius, create a new section of the city with a decidedly Flavian stamp. It also offered an opportunity to overlay a positive image of rule to replace what immediately preceded it and at the same time harness the positive aspects of the Augustan era.

The Colosseum was the grandest of the Empire and it formed the centrepiece of this new district that, together with the Forum Romanum and Campus Martius, completed the image of the Flavian city. Like the Forum Transitorium, it acted as node and landmark: a very public building to occupy, rather significantly, what was once the private space of Nero’s villa.⁹⁶ This gigantic act of *providentia* was supported by a number of new buildings in the immediate vicinity: four *ludi* to house and train gladiators, the Baths of Titus (which made ample use of Nero’s former dining hall for its foundations) and the Meta Sudans – a cone-shaped monumental fountain that led visitors around to the left to view the memorial arch to Titus.⁹⁷ The Meta Sudans fulfilled the dual role of partially obscuring the Colossus of Nero for citizens approaching along the Via Triumphalis and masking the divergent axes between this line and the pre-existing Neronian Grid.⁹⁸ The sheer size of the statue presented a practical problem in the programme of *damnatio memoriae* put in place by Vespasian; he therefore limited himself to symbolic actions like rededicating it to Sol and allowing reports to circulate that it resembled his son and heir, Titus. If the latter still reminded Roman citizens of Nero, it reminded them of his excess, and further, its height had the function of drawing spectators into the orbit of the newly restored and resplendent area.⁹⁹

Martial’s description illustrates Flavian benevolence in contrast to Neronian selfishness, and like Statius for the *Equus* it offers a literary reinforcement of the district’s Flavian identity:

When the starry colossus sees the constellations at close range and lofty scaffolding rises in the middle of the road, once gleamed the odious halls of a cruel monarch, and in all Rome there stood a single house. Where rises before our eyes the august pile of the Amphitheatre, was once Nero’s lake. Where we admire the warm baths, a speedy gift, a haughty tract of land had robbed the poor of their dwellings. Where the Claudian colonnade unfolds its wide-spread shade, was the outermost part of the palace’s end. Rome has been restored to herself, and under your rule, Caesar, the pleasantries that belonged to a master now belong to the people.¹⁰⁰

Like their counterparts entering the city from the north and north-west, travellers from the south were presented with a narrative of Flavian monuments as part of their daily lives.¹⁰¹ For travellers from the south, the first landmark to strike the eye was the curved end of the Circus Maximus with an arch dedicated to Titus in its centre¹⁰² (see Figure 9.11). This brought a building previously associated with leisure and entertainment into the Flavians’ civic narrative.¹⁰³ Travellers and inhabitants on the Aventine



Figure 9.11 Reconstruction of Circus Maximus

Source: Author 2014.

(*regio* XII) then picked up the Via Triumphalis and beheld the magnificence of the Domus Flavia. Domitian's palace on the Palatine stood as tall as a ten story building and erased the distinction between the Palatine and the palatium built upon it.¹⁰⁴ Statius described it as "august . . . immense, magnificent and not with a mere hundred columns but enough to support high Heaven and the gods above." The Domus Flavia was so splendid that Statius imagined that even Domitian's own Temple of Jupiter Optimus Maximus viewed it in wonder.¹⁰⁵ This new path from the south was, in fact, as much about telling a narrative for the public arriving into the Forum as it was about creating a ceremonial ascent to the Palatine that over-rode Nero's paths to the Domus Aurea, subverted traditional paths of the Republican era, re-traced the steps of the triumphal parade and brought attention towards the Flavian centre of power¹⁰⁶ (see Figure 9.12).

On the other side stood the newly re-constructed Temple of the Deified Claudius on the Caelian, which had been left incomplete by Claudius's wife Agrippina and was in turn converted by Nero into a hanging garden within his villa complex.¹⁰⁷ In this way Vespasian obliterated the actions of Nero and replaced them with one of his own. He acknowledged the role Claudius had played in advancing his career and at the same time paid respect to the dynasty that he would so deservedly replace.¹⁰⁸ Marking the end of the axis was the Meta Sudans with the Colosseum as backdrop. With the Meta Sudans at one's shoulders, almost every building in view spoke of Flavian rule: the Arch of Titus with its accompanying Aedes Jupiter Propugnator were testimonies to triumph; a new Temple for Augustus on the Palatine strengthened links between the two golden ages. Upon reaching the top of the hill, the Valley of the Forum opened itself to the viewer,

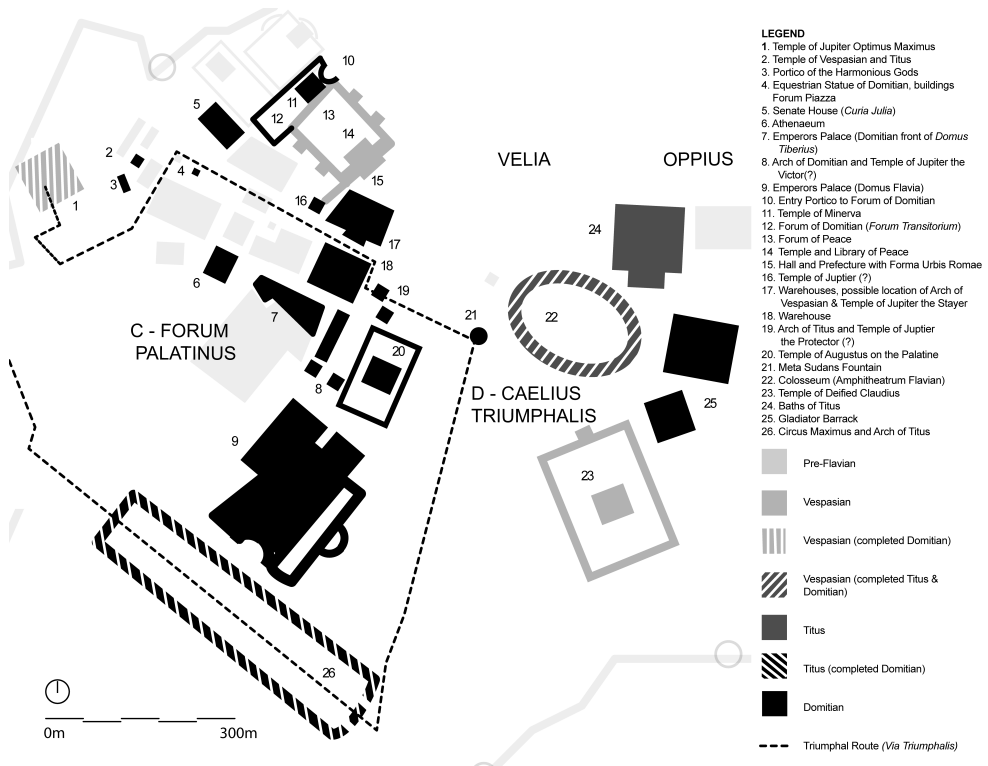


Figure 9.12 New District of the Flavian City: detailed map of districts C and D: Caelius/Triumphalis in relation to the Forum

continuing the narrative of generous, benevolent, triumphant rule along the Via Sacra. The *Horreae Piperataria* and *Domitiani*, which contained precious medical spices and grain, highlighted that the Flavians governed over trade and provided for all. The *Bibliotheca Pacis* showed that public knowledge and education was paramount and the side wall of the *Templum Pacis*, that ‘microcosm of the world’, reminded citizens and visitors alike of the triumph and of the priceless objects of art that they had just seen represented in the *bas reliefs* of Titus’ arch.¹⁰⁹ Just after the complex of Vesta (restored by Domitian),¹¹⁰ the view was blocked by the back of the Temple of the Deified Julius Caesar.¹¹¹ The space then opened up for one to be met with the eye of Domitian himself who gazed over the entire Forum piazza from his horse.¹¹² The *Equus Domitiani* would have looked directly at the Temple of the Deified Julius Caesar and (rather conveniently) blocked the sight of the Rostra. His shoulders were framed by the Capitoline Hill upon which one saw from right to left: the Temple of Concord, which linked to the Peace brought by the Flavians, the Temple of Vespasian and Titus which attested to both their own divinity and the (future) divinity of Domitian, the recently restored *Aedes Deorum Consentium* which was rebuilt almost as one with its neighbour and finally, the resplendent temple to the Jupiter Optimus Maximus, god of all gods that brought all the threads together.¹¹³ The effect of the *Equus* as

landmark is confirmed by Martial whose directions to the house of Proculus went as follows:

You will pass the temple of Castor close by ancient Vesta, and the house of the Virgins. From there you will take the Sacred slope and make for the august Palatine, where shines many an image of our exalted leader. Do not be delayed by the rayed mass of the marvelous colossus that joys to outdo the work of Rhodes.¹¹⁴

Conclusion

When the Flavians came to power, they employed a precise urban strategy that involved the restoration, repurposing and construction of an unprecedented number of buildings. This strategy really comes to the fore when each intervention is understood to play a role in an overall narrative dependent on the physical and visual connections between landmarks and the progressions and sequences of movement through which they were perceived. They overlaid their own physical and symbolic urban image onto two of Rome's principal districts: the Campus Martius and the Forum Romanum. Both bore the positive stamp of the Augustan age and, aided by the destruction of civil war and fire, the Flavians were given the opportunity to harness the power of Augustus's city image and add to it with their own interventions and restorations. Politically, this image of the city firmly established the legitimate rule of the triumphant Flavians through the symbolic revival of the golden age of Augustus, which took shape as a series of civic narratives told by the careful placement of nodes and landmarks along both everyday and ceremonial paths. To these they added a new identifiably Flavian district whose negative associations with their predecessor, Nero, were harnessed in the same way to their advantage with the addition of major new landmarks to convey the benevolence of orderly rule and the stamp of triumph. The principal landmarks of these three central areas, whether temples, forums, arches or statues, were arrived at through a carefully constructed civic narrative that depended on citizens' capacity to read the urban landscape like a book. These narratives began from the principal arteries leading into the city and picked up the flows of everyday paths into the city centre. This was particularly evident in the small but strategic interventions throughout the Suburra and in the approach from the south. This Lynchian analysis of Flavian Rome through maps has opened up new directions in perceptions and understandings of ancient plans not based on the urban grid but conceptualised on the interconnection of identifiable districts through a network of paths and vistas between nodes of public space and the landmarks that identify them. This approach took into account the known political agendas used by the Romans behind their building programmes and focused on the two main points of rhetoric about Flavian rule: triumph and the resurgence of a new golden age.

Acknowledgements

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Notes

- 1 Martial, *Spectacles*, D.R.S. Bailey, ed. and trans. (Cambridge, MA: Harvard University Press, 1993), 37.
- 2 Suetonius, *Nero in The Lives of the Twelve Caesars*, J. E. Reed & A. Thomson, ed. and trans. (Philadelphia: Gebbie & Co. 1889), 34–6.
- 3 R.H. Darwall-Smith, *Emperors and Architecture: A Study of Flavian Rome* (Bruxelles: Latomus, 1996), 18.
- 4 Kevin Lynch developed a method of urban analysis based on the inter-relationship between five elements: Paths, Edges, Districts, Nodes and Landmarks. K. Lynch, *The Image of the City* (Cambridge, MA: MIT Press, 1960), 47–8. Originally based on interviews with its inhabitants and used to understand the urban image of contemporary cities such as Los Angeles, Boston and Jersey City, the Lynchian method has been successfully applied to building the image of an ancient city in D. Favro, *The Urban Image of Augustan Rome* (New York: Cambridge University Press, 1996), 193–214.
- 5 All maps are by the author with the assistance and advice of Francesca de Caprariis and Robin Haydon Darwall-Smith and the graphic skills of Brandon Gardiner. They have been compiled using a number of sources. It uses as its base G. Lugli and I. Gismondi, “Forma Urbis Romae Imperatorum Aetate,” 1949 of *Le Pianta di Roma*, ed. Pietro Amato Frutaz, Vol. II (Rome: Istituto di Studi Romani, 1962). Its use is with kind permission of the Istituto di Studi Romani. It has been modified and supplemented in Adobe Photoshop using the following references: F. Coarelli, *Foro Boario Dalle origini all fine della repubblica* (Rome: Edizioni Quasar, 1988), 13–20 and 363–414; A. Carandini (ed.), *Atlante di Roma Antica*, Vol. II (Milan: Electa, 2012), plates: 7, 23, 29, 30, 35, 36, 38–41, 44, 48–51, 76–81, 93, 97–100, 104, 113–7, 148, 153, 171, 175–6, 180–2, 185, 208, 214, 220–43, 247, 270–3, 275; Cooperativa MODUS, “Il complesso dei Fori imperiali riunito alla zona archeologica del Foro Romano e del Palatino come risulterà a completa attuazione del progetto per la valorizzazione dell’area archeologica centrale,” of I. Perego and F. Perego, *Archeologia e città. Storia moderna dei Fori di Roma* (Bari: Laterza, 1983); M. Torelli, “Culto imperiale e spazi urbani in età flavia: Dai rilievi Hartwig all’arco di Tito,” in *L’Urbs: espace urbain et histoire – Ier siècle av. J.-C. – IIIe siècle ap. J.-C.* (Rome: Collection de l’Ecole Française de Rome, 1985), 580–1; M. Thomas, “(Re)locating Domitian’s Horse of Glory: The Equus Domitiani and Flavian Urban Design,” *Memoirs of the American Academy in Rome* 49 (2004): 38; J.C. Anderson, “Domitian, the Argiletum and the Temple of Peace,” *American Journal of Archaeology* 86, no. 1 (January 1982): 102–4 and 109; Darwall-Smith, *Emperors and Architecture*, 41–7, 48–52, 55–70, 78–82, 90–8, 105–10, 112–3, 115–8, 120–7, 130–4, 136, 138, 142–5, 145–9, 160–5, 166–72, 180–99, 202–16 and 218–45; F. Coarelli (ed.), *Divus Vespasianus; Il Bimillenario Dei Flavi* (Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma, 2009); C. Häuber, “Archäologische Stadtforschung: Teil I: Das Beispiel Rom,” accessed 22/01/2014, www.rom.geographie.uni-muenchen.de/publications/Archaeologische_Stadtforschung_Rom.html.
- 6 Lynch, *Image of the City*, 47.
- 7 Favro, *Augustan Rome*, 206.
- 8 A. Viscogliosi, “Il Foro Transitorio,” in *Divus Vespasianus*, 202.
- 9 Favro, *Augustan Rome*, 255–71.
- 10 Principally Darwall-Smith, *Emperors and Architecture*, in *Flavian Rome: Culture, Image, Text*, ed. A.J. Boyle and W.J. Dominick (Leiden and Boston, MA: Brill, 2003) and *Divus Vespasianus* as well as numerous other articles cited in Note 4.
- 11 Favro, *Augustan Rome*.
- 12 *Ibid.*, 223–7.
- 13 Thomas, “(Re)locating Domitian’s Horse,” 21–46.
- 14 Lynch, *Image of the City*, 47–8.
- 15 J. Packer, “Plurima et amplissima opera: Parsing Flavian Rome,” in *Flavian Rome: Culture, Image, Text*, ed. A.J. Boyle and W.J. Dominick (Leiden and Boston, MA: Brill, 2003), 167–98.
- 16 Suetonius, *Vespasian*, 8.
- 17 Suetonius, *Titus*, 8.
- 18 Darwall-Smith, *Emperors and Architecture*, 76.

- 19 D. Frederick, "Architecture and Surveillance in Flavian Rome," in *Flavian Rome: Culture, Image, Text*, 199–227. Also see J. Elsner, "Constructing Decadence: The Representation of Nero as Imperial Builder," in *Reflections of Nero: Culture, History and Representation*, ed. J. Elsner and J. Masters (Chapel Hill, NC: University of North Carolina Press, 1994).
- 20 Torelli, "Culto imperiale," 578–82.
- 21 Suetonius, *Domitian*, 1; Pierre Gros, "La Roma dei Flavi. L'architettura," 104.
- 22 Josephus, *De bello judaico*, 7.122.
- 23 M. Beard, "The Triumph of Flavius Josephus," in *Flavian Rome: Culture, Image, Text*, 558.
- 24 Frederick, "Architecture and Surveillance," 205–9.
- 25 Lynch, *Image of the City*, 47–8.
- 26 M.C. Capanna, "Le vie," in *Atlante di Roma Antica*, ed. A. Carandini, Vol. II (Milan: Electa, 2012), 90–1.
- 27 Viscogliosi, "Il Foro Transitorio," 202.
- 28 Lynch, *Image of the City*, 48.
- 29 Favro, *Augustan Rome*, 6–7.
- 30 *Ibid.*, 214.
- 31 *Ibid.*, 128–33.
- 32 Suetonius, *Vespasian*, 8; Darwall-Smith, *Emperors and Architecture*; J.W. Stamper, *The Architecture of Roman Temples: The Republic to the Middle Empire* (Cambridge: Cambridge University Press, 2005).
- 33 Lynch, *Image of the City*, 47.
- 34 Darwall-Smith, *Emperors and Architecture*, 211–2.
- 35 Favro, *Augustan Rome*, 212.
- 36 Lynch, *Image of the City*, 47.
- 37 Favro, *Augustan Rome*, 208.
- 38 For a general description see L. Casson, *Everyday life in Ancient Rome* (Baltimore, MD: Johns Hopkins University Press, 1998), 44–7.
- 39 Suetonius, *Domitian*, 13. Darwall-Smith has listed these as the Arch of Titus, Arch of Janus, Fortuna Redux, Campigiliano (Isis and Serapis), Porticus Divorum, Palatine, Janus near Minerva, un-named arch on the Haterii relief. Darwall-Smith, *Emperors and Architecture*, 238–9.
- 40 Favro, *Augustan Rome*, 212.
- 41 M.T. D'Alessio, "Regione IX. Circus Flaminius," in *Atlante di Roma Antica*, 506–12.
- 42 Favro, *Augustan Rome*, figure 103, 208–9 and 258–71. For more detailed accounts on the evolving topography of the Campus Martius see: L. Quilici, "Il campo marzio occidentale," in *Città e architettura nella Roma imperiale: Atti del seminario del 27 ottobre 1981 nel 25 anniversario dell'Accademia di Danimarca*, ed. K. de Fine Licht (Odense: Odense University Press, 1983), 59–85; S.Q. Gigli, "Estremo Campo Marzio. Alcune osservazioni sulla topografia," in *Città e architettura nella Roma imperiale*, 47–57.
- 43 Josephus, *De bello judaico*, 7.123–4; Darwall-Smith, *Emperors and Architecture*, 141–2.
- 44 For a full account of the parade see Josephus, *De bello judaico*, 7. Another somewhat outdated but useful description can be found in: E. Makin, "The Triumphal Route, With Particular Reference to the Flavian Triumph," *The Journal of Roman Studies* 11 (1921): 25–36. For the latest reconstruction of the route, upon which the maps in this paper are based, see D'Alessio, "Regione IX," 513–4. For a discussion of the location of the *Porta Triumphalis* and the problematics of reconstructing the route see also M. Beard, *The Roman Triumph* (London: Belknap Press, 2007).
- 45 See Beard, *The Roman Triumph*.
- 46 Coarelli, "I Flavi e Roma," in *Divus Vespasianus*, 68.
- 47 Beard, "The Triumph of Flavius Josephus," 550–1.
- 48 *Ibid.*, 551–2.
- 49 *Ibid.*, 552.
- 50 Cassius, *Historia*, 66, 17, 2; Dąbrowa, "The Origin of the Templum Gentis Flaviae," 156.
- 51 Darwall-Smith, *Emperors and Architecture*, 95–7.
- 52 Cassius, *Historia*, 66, 24, 2.
- 53 Darwall-Smith, *Emperors and Architecture*, 252.
- 54 *Ibid.*, *Emperors and Architecture*, 142–5, 221–6 and 240.

- 55 F. Coarelli, "I Flavi e Roma," in *Divus Vespasianus*, 75.
- 56 Torelli, "Culto imperiale e spazi urbani", 571–2.
- 57 Josephus, *De bello judaico*, 7.124.
- 58 D'Alessio, "Regione IX," 517–8; Darwall-Smith, *Emperors and Architecture*, 125–6 and 156–9.
- 59 Coarelli, "I Flavi e Roma," 75.
- 60 Josephus, *De bello judaico*, 7.158.
- 61 See E. Pollard, "Pliny's Natural History and the Flavian Templum Pacis: Botanical Imperialism in First-Century Rome," *Journal of World History* 20, no. 3 (September 2009): 312. Recent digs between 1998 and 2007 have shed new light on the complex, see R. Meneghini, A. Corsaro, and B.P. Caboni, "Il Templum Pacis alla luce dei recenti scavi," in *Divus Vespasianus*, 190–201.
- 62 Coarelli, "I Flavi e Roma," 73; Darwall-Smith, *Emperors and Architecture*, 8–55. This plan is known to us through a marble reproduction dating the Severan reconstruction of the complex. See L. Taub, "The Historical Function of the Forma Urbis Romae," *Imago Mundi* 45 (1993): 9–19. For the Severan plan see Frutaz, *Le piante di Roma*, Vol. I, pp. 39–41 and Vol. II, plates, I–II. For a reconstruction of the room see Coarelli (ed.), *Divus Vespasianus*, 192.
- 63 Stamper cites the Temple to Jupiter as reference (Stamper, *The Architecture of Roman Temples*, 157) while for Tucci it is Mars (Tucci, "Nuove osservazioni sull'architettura del Templum Pacis," in *Divus Vespasianus*, 163). The references to Jerusalem are argued by M. Gaggiotti, "Templum Pacis: una nuova lettura," *Divus Vespasianus*, 168 and 172–3.
- 64 Meneghini et al., "Il Templum Pacis alla luce dei recenti scavi," in *Divus Vespasianus*, 193–7. For a detailed account of the Greek artworks on display see A. Bravi, "Immagini adeguate: opera d'arte greche nel Templum Pacis," in *Divus Vespasianus*, 176–83.
- 65 Martial, *Epigrams*, trans. D.R. Shackleton Bailey (Cambridge, MA: Harvard University Press, 1994), 3 and 38; Gros, "La Roma dei Flavi. L'architettura," *Divus Vespasianus*, 107.
- 66 Gros, "La Roma dei Flavi. L'architettura," 107–8; Darwall-Smith, *Emperors and Architecture*, 246–8.
- 67 M.C. Capanna, "Regione VI. Alta Semita," in *Atlante di Roma Antica*, ed. Carandini, Vol. I, pp. 459–61; Suetonius, *Nero*, 48; Tacitus, *Histories*, 1.31, 2.53, 3.48.
- 68 Most scholars agree that that this is almost certainly located between the octagonal hall of the later Baths of Diocletian and the Church of San Bernardo. See various articles on the topic in *Divus Vespasianus*.
- 69 Based on the work of D. Candilio and E. La Rocca, "Il Templum Gentis Flaviae," in *Divus Vespasianus*, 224.
- 70 Darwall-Smith, *Emperors and Architecture*, 159–65; Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 459; Coarelli, "I Flavi e Roma," in *Divus Vespasianus*, 93–4; Torelli, "Culto imperiale e spazi urbani," 568–72; E. Dąbrowa, "The Origin of the Templum Gentis Flaviae: A Hypothesis," *Memoirs of the American Academy in Rome* 41 (1996): 158–60. For descriptions see Martial, *Spectacles* 9.1.8–10, 34.1–2, 7–8. and Statius, *Silvae*, 5.1. 237–41.
- 71 La Rocca, "Il Templum Gentis Flaviae," in *Divus Vespasianus*, 228.
- 72 Dąbrowa, "The Origin of the Templum Gentis Flaviae," 153–5.
- 73 Martial, 9.1.6–10; La Rocca, "Il Templum Gentis Flaviae," in *Divus Vespasianus*, 228.
- 74 Dąbrowa, "The Origin of the Templum Gentis Flaviae," 158–60.
- 75 Capanna, "Regione VI. Alta Semita," 461; Darwall-Smith, *Emperors and Architecture*, 182; Dio Cassius, *Historia*, 10.4. 66–5. See also C. Häuber, "Gli horti in età flavia," in *Divus Vespasianus*, 312–9.
- 76 These were the Suburra roads: Vicus/Clivus Salutis and the Vicus Longus, the Clivus Viminalis that picked up the so-called Via Salaria Vetus, the Clivus Suburanus that funnelled travellers from Tusculum along the Via Labicana and through the Porta Esquilina, Eastern traffic from Tibur along the Via Tiburtina and Via Preanestina through Regio V. For a full table of the various horti see M.C. Capanna, "Gli horti," in *Atlante di Roma Antica*, Vol. I, 74–8. For each road see: Platner and Ashby entries. S.B. Platner (as completed and revised by T. Ashby), *A Topographical Dictionary of Ancient Rome* (London: Oxford University Press, 1929), accessed 05/12/2014, http://penelope.uchicago.edu/Thayer/E/Gazetteer/Places/Europe/Italy/Lazio/Roma/Rome/_Texts/PLATOP*/home*.html

- 77 Because the porticus was destroyed, the material of the columns is not known though it could be safely assumed that they matched those lining the inside of the Templum which were either of *pavonazzetto* or pink granite. P.L. Tucci, "Nuove osservazioni sull'architettura del Templum Pacis," 162–3. Viscogliosi confirms that the *Colonnacce* still visible today were part of the porticus. Viscogliosi, "Il Foro Transitorio," 208. For a full description of the columns and their friezes see Darwall-Smith, *Emperors and Architecture*, 118–20.
- 78 Anderson, "Domitian, the Argiletum," 101–10; Packer, "Plurima et amplissima opera," 174–7; Viscogliosi, "Il Foro Transitorio," 202–3.
- 79 Viscogliosi, "Il Foro Transitorio," 202.
- 80 Packer, "Plurima et amplissima opera," 175.
- 81 Statius, *Silvae*, 1.1.22–36; Coarelli, *Divus Vespasianus*, 80–3; Thomas, "(Re)locating Domitian's Horse of Glory," 31–2; Darwall-Smith, *Emperors and Architecture*, 229–30.
- 82 Richardson Jr., *A New Topographical Dictionary of Ancient Rome*, 144–5; Coarelli, "I Flavi e Roma," 82.
- 83 A. Hardie, *Statius and the Silvae: Poets, Patrons and Epideixis in the Graeco-Roman World* (Liverpool: Francis Cairns, 1983), 131.
- 84 An opinion shared by Thomas, "(Re)locating Domitian's Horse of Glory," 38; Torelli, "Culto imperiale e spazi urbani," 580–1 but disputed by Darwall-Smith, *Emperors and Architecture*, 227–32; Filippo Coarelli, *Il foro romano: Periodo repubblicano e augusteo* (Rome: Edizioni Quasar, 1985), 321. Coarelli's most recent placement is further south and lines up with the third last archway of the Basilica Julia towards the Aedes Castori. Coarelli, "I Flavi e Roma," 81–3. This position undermines the narrative of this pathway but does not entirely diminish either its message or its effect.
- 85 Stamper, *The Architecture of Roman Temples*, 154. He cites descriptions from Plutarch, *Publ.* 15.4 and Zos. 5.38.5. On the Capitoline Domitian also built temples to Jupiter Custos and Isis, a Sacellum to Jupiter Conservator and re-built the Moneta in Arcis in honour of Juno; A. Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 175. For more detailed accounts of the Capitoline Hill under the Flavians see F.P. Arata, "I Flavi in Campidoglio," in *Divus Vespasianus*, 210–7; P.L. Tucci, "La sommità settentrionale del Campidoglio all'epoca dei Flavi," in *Divus Vespasianus*, 218–21; F. Coarelli, "Isis Capitolina," in *Divus Vespasianus*, 222–3.
- 86 Coarelli, "I Flavi e Roma," 75.
- 87 Torelli, "Culto imperiale, 572–5; Stamper, *The Architecture of Roman Temples*, 161. For more on the imperial cult of the Flavians see Duncan Fishwick, "Il culto imperiale," in *Divus Vespasianus*, 344–7.
- 88 Stamper, *The Architecture of Roman Temples*, 160.
- 89 *Ibid.*, 168–72.
- 90 Josephus, *De bello judaico*, 7.132.
- 91 *Ibid.*, 7.147.
- 92 Coarelli, "I Flavi e Roma," 87.
- 93 *Ibid.*, 87–8; D. Brinkerhoff, "An Immodest Aspect of the Arch of Titus," in *Akten des XIII. Internationalen Kongresses für Archäologie Berlin 1988* (Mainz am Rhein: Philipp von Zabern, 1990), 534–5. Torelli has hypothesised that a rectangular cement base at the bottom of the Via Sacra could be evidence of an access arch to the Forum dedicated to Vespasian thus meaning that each of the Flavians had an arch dedicated to him with a temple to Jupiter close by which would undeniably identify the greatest of the Gods with each *triumphator*. Vespasian was paired with Jupiter Stator (the Stayer), Titus with Jupiter Propugnator (the Defender) and Domitian with Jupiter Victor (the Victor). In addition, both Vespasian and Titus were associated with Jupiter Optimus Maximus Capitolinus by virtue of the fact that each had re-built the temple the Capitolium. Torelli, "Culto imperiale," 578–9.
- 94 Stamper, *The Architecture of Roman Temples*, 171.
- 95 Suetonius, *Nero*; Darwall-Smith, *Emperors and Architecture*, 36–40.
- 96 Darwall-Smith, *Emperors and Architecture*, 78–82 and 215–6.
- 97 Gros, "La Roma dei Flavi. L'architettura," in *Divus Vespasianus*, 101.
- 98 Marlowe, "Framing the Sun: The Arch of Constantine and the Roman Cityscape," *Art Bulletin* 88, no. 2 (June 2006): 224. See also Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 237–40.
- 99 Marlowe, "Framing the Sun," 228–9; Darwall-Smith, *Emperors and Architecture*, 68–9.

- 100 Martial, *Spectacles*, 2.
- 101 Marlowe, "Framing the Sun," 223–42 has been of use here.
- 102 The main route from the South was the Via Appia connecting Rome to Pompeii, Herculaneum and all the way down to the port of Brundisium and entering the walls through the Porta Capena. Another important artery was the Via Ostiense that connected Rome to its port and entered the city through the Porta Raudusculana before joining the Vicus Piscinae Publicae that skirted the edge of the Circus before veering to the left to join the Via Triumphalis.
- 103 Torelli, "Culto imperiale," 576; Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 434. Constantine was to employ the very same strategy three centuries later. Marlowe, "Framing the Sun," 229; Darwall-Smith, *Emperors and Architecture*, 95–6.
- 104 D. Bruno, "Regione X. Palatium," in *Atlante di Roma Antica*, Vol. I, 240.
- 105 Statius, *Silvae* 4, 2.
- 106 Coarelli, "I Flavi e Roma," in *Divus Vespasianus*, 90.
- 107 Giada Fatucci, "Regione II. Caelimontum," in *Atlante di Roma Antica*, Vol. I, 347; Darwall-Smith, *Emperors and Architecture*, 48–52. And various ancient sources.
- 108 Suetonius, *Vespasian*, 4.
- 109 Beard, "Flavius Josephus," 555; Darwall-Smith, *Emperors and Architecture*, 55–68 and 234–6; Josephus, *De bello judaico* 7.158–62; Coarelli, "I Flavi e Roma," 86–7.
- 110 Darwall-Smith, *Emperors and Architecture*, 138 & 233.
- 111 Carandini (ed.), *Atlante di Roma Antica*, Vol. II, Plate 93 shows a single Arch of Augustus attached to the Porticus and Plate 41 shows the three-way arch between the Temple of the Deified Julius Caesar and the Temple of Castor and Pollux.
- 112 Thomas, "(Re)locating Domitian's Horse of Glory," 26–8.
- 113 Torelli, "Culto imperiale," 579; Darwall-Smith, *Emperors and Architecture*, 97–8 and 154–6.
- 114 Martial, *Epigrams* 1, 70.

Bibliography

- Anderson, J.C. 1982. "Domitian, the Argiletum and the Temple of Peace." *American Journal of Archaeology* 86, no. 1, January: 101–10. Accessed 05/09/2011, www.jstor.org/stable/504296
- Anderson, J.C. 1983. "A Topographical Tradition in Fourth Century Chronicles: Domitian's Building Program." *Historia: Zeitschrift für Alte Geschichte* 32, no. 1: 93–105. Accessed 05/09/2011, www.jstor.org/stable/4435833.
- Arata, F.P. 2009. "I Flavi in Campidoglio." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario dei Flavi*, 210–17. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Beard, M. 2003. "The Triumph of Flavius Josephus." In A.J. Boyle and W.J. Dominick (eds.), *Flavian Rome: Culture, Image, Text*, 543–58. Leiden and Boston, MA: Brill.
- Beard, M. 2007. *The Roman Triumph*. London: Belknap Press.
- Bravi, A. 1990. "Immagini adeguate: opera d'arte greche nel Templum Pacis." In D. Brinkerhoff (eds.), "An Immodest Aspect of the Arch of Titus." *Akten des XIII. Internationalen Kongresses für Archäologie Berlin 1988*, 534–5. Mainz am Rhein: Philipp von Zabern.
- Bruno, D. 2012. "Regione X. Palatium." In A. Carandini (ed.), *Atlante di Roma Antica: Biografia e ritratti della città*, Vol. I, 215–80. Milan: Electa.
- Capanna, M.C. 2012a. "Gli horti." In A. Carandini (ed.), *Atlante di Roma Antica*, Vol I, 74–8. Milan: Electa.
- Capanna, M.C. 2012b. "Le vie." In A. Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 90–1. Milan: Electa.
- Capanna, M.C. 2012c. "Regione VI. Alta Semita." In A. Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 446–73. Milan: Electa.
- Carandini, A., D. Bruno, and F. Fraioli. 2010. *Le case del potere nell'antica Roma*. Rome: Laterza.

- Carandini, A. (ed.) 2012. *Atlante di Roma Antica: Biografia e ritratti della città*, Vols. II. Milan: Electa.
- Cassius, D. 1914. *Historia* (E. Cary and H.B. Foster, trans.). Cambridge, MA: Harvard University Press.
- Casson, L. 1998. *Everyday Life in Ancient Rome*. Baltimore, MD: Johns Hopkins University Press.
- Coarelli, F. 1983. *Il foro romano. Vol I: Il periodo arcaico*. Rome: Edizioni Quasar.
- Coarelli, F. 1983. *Il foro romano. Vol II: Periodo repubblicano e augusteo*. Rome: Edizioni Quasar.
- Coarelli, F. 1988. *Il foro boario. Dalle origini all'fine della repubblica*. Rome: Edizioni Quasar.
- Coarelli, F. 2009. "I Flavi e Roma." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 68–97. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Coarelli, F. 2009. "Isis Capitolina." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 222–3. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Coarelli, F. (ed.) 2009. *Divus Vespasianus: il bimillenario dei Flavi*. Milan: Electa.
- Coarelli, F. (ed.) 2009. *Divus Vespasianus: Il Bimillenario Dei Flavi*, 176–83. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- D'Alessio, M.T. 2012. "Regione IX. *Circus Flaminius*." In A. Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 493–541. Milan: Electa.
- Dąbrowa, E. 1996. "The Origin of the "Templum Gentis Flaviae: A Hypothesis." *Memoirs of the American Academy in Rome* 41: 153–61. Accessed 16/08/2013, www.jstor.org/stable/4238739.
- Darwall-Smith, R.H. 2006. *Emperors and Architecture: A Study of Flavian Rome*. Bruxelles: Latomus.
- Davies, P.J.E. 2000. *Death and the Emperor: Roman Funerary Monuments- From Augustus to Marcus Aurelius*. Cambridge: Cambridge University Press.
- de Fine Licht, K. (ed.) 1983. *Città e architettura nella Roma imperiale: Atti del seminario del 27 ottobre 1981 nel 25 anniversario dell'Accademia di Danimarca*. Odense: Odense University Press.
- Elsner, J., and J. Masters. 1994. *Reflections of Nero: Culture, History and Representation*. Chapel Hill, NC: University of North Carolina Press.
- Fatucci, G. 2012. "Regione II. *Caelimontum*." In A. Carandini (ed.), *Atlante di Roma Antica*, Vol. I, 342–58. Milan: Electa.
- Favro, D. 1996. *The Urban Image of Augustan Rome*. Cambridge: Cambridge University Press.
- Fishwick, D. 2012. "Il culto imperiale." In A. Carandini (ed.), *Atlante di Roma Antica*. Vol I, 344–7. Milan: Electa.
- Frederick, D. 2003. "Architecture and Surveillance in Flavian Rome." In A.J. Boyle and W.J. Dominick (eds.), *Flavian Rome: Culture, Image, Text*, 199–227. Leiden and Boston, MA: Brill.
- Frutaz, P.A. (ed.) 1962. *Le Piante di Roma*. Rome: Istituto di Studi Romani.
- Gros, P. 2009. "La Roma dei Flavi. L'architettura." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 98–109. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Hardie, A. 1983. *Statius and the Silvae: Poets, Patrons and Epideixis in the Graeco-Roman World*. Liverpool: Francis Cairns.
- Häuber, C. 2009. "Gli horti in età flavia." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 312–9. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Insolera, I. 1985. *Roma. Immagini e realtà dal X al XX Secolo*. Bari: Laterza.
- Insolera, I., and F. Perego. 1983. *Archeologia e città: Storia moderna dei Fori di Roma*. Bari: Laterza.
- Josephus. 1927. *De bello judaico* (H.St.J. Thackeray, trans.). Cambridge, MA: Harvard University Press.

- La Rocca, E. 2009. "Il *Templum Gentis Flaviae*." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 224–33. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Lynch, K. 1960. *The Image of the City*. Cambridge, MA: MIT Press.
- Makin, E. 1921. "The Triumphal Route, With Particular Reference to the Flavian Triumph." *The Journal of Roman Studies* 11: 25–36. Accessed 15/08/2013, www.jstor.org/stable/295885
- Marlowe, E. 2006. "Framing the Sun: The Arch of Constantine and the Roman Cityscape." *Art Bulletin* 88, no. 2, June: 223–42.
- Martial. 1993a. *Epigrams* (D.R.S. Bailey, ed. and trans.). Cambridge, MA: Harvard University Press.
- Martial. 1993b. *Spectacles* (D.R.S. Bailey, ed. and trans.). Cambridge, MA: Harvard University Press.
- Meneghini, R, A. Corsaro, and B.P. Caboni. 2009. "Il *Templum Pacis* alla luce dei recenti scavi." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 190–201. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Newlands, C.E. 2002. *Statius' Silvae and the Poetics of Empire*. Cambridge: Cambridge University Press.
- Packer, J. 2003. "Plurima et amplissima opera: Parsing Flavian Rome." In A.J. Boyle and W.J. Dominick (eds.), *Flavian Rome: Culture, Image, Text*, 167–98. Leiden and Boston: Brill.
- Platner, S.B. (as completed and revised by Thomas Ashby). 1929. *A Topographical Dictionary of Ancient Rome*. London: Oxford University Press.
- Pollard, E. 2009. "Pliny's *Natural History* and the Flavian *Templum Pacis*: Botanical Imperialism in First-Century Rome." *Journal of World History* 20, no. 3, September: 309–39.
- Quilici Gigli, S. 1983. "Estremo Campo Marzio. Alcune osservazioni sulla topografia." In K. de Fine Licht (ed.), *Città e architettura nella Roma imperiale*, 47–57. Odense: Odense University Press.
- Quilici, L. 1983. "Il campo marzio occidentale." In K. de Fine Licht (ed.), *Città e architettura nella Roma imperiale*, 59–85. Odense: Odense University Press, 1983.
- Richardson, L. Jr. 1992. *A New Topographical Dictionary of Ancient Rome*. Baltimore, MD: Johns Hopkins University Press.
- Stamper, J.W. 2005. *The Architecture of Roman Temples: The Republic to the Middle Empire*. Cambridge: Cambridge University Press.
- Statius. 2003. *Silvae* (D.R.S. Bailey, ed. and trans.). Cambridge, MA: Harvard University Press.
- Suetonis. 1914. *De vita Caesarum* (J.C. Rolfe, trans.). Cambridge, MA: Harvard University Press.
- Taub, L. 1993. "The Historical Function of the *Forma Urbis Romae*." *Imago Mundi* 45: 9–19.
- Thomas, M. 2004. "(Re)locating Domitian's Horse of Glory: The *Equus Domitiani* and Flavian Urban Design." *Memoirs of the American Academy in Rome* 49: 21–46. Accessed 05/09/2011, www.jstor.org/stable/4238816.
- Torelli, M. 1987. "Culto imperiale e spazi urbani in età flavia. Dai rilievi Hartwig all'Arco di Tito." In *L'Urbs: espace urbain et histoire (Ier siècle av. J.-C.- IIIe siècle ap. J.-C.): actes du colloque international organisé par le Centre national de la recherche scientifique et l'Ecole française de Rome (Rome, 8–12 mai 1985)*, 582. Rome: Ecole française de Rome.
- Tucci, P.L. 2009. "Nuove osservazioni sull'architettura del *Templum Pacis*." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 158–67. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Tucci, P.L. 2009. "La sommità settentrionale del Campidoglio all'epoca dei Flavi." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 218–21. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.
- Viscogliosi, A. 2009. "Il Foro Transitorio." In F. Coarelli (ed.), *Divus Vespasianus: Il Bimillenario Dei Flavi*, 202–91. Rome: Ministero per i Beni e le Attività Culturali, Soprintendenza Speciale per i Beni Archeologici di Roma.

10 Albano

Castrum to town

Allan Ceen

The ancient *Regina Viarum*, better known as Via Appia Antica, arrows southeast from Rome in a dead straight line, and is joined by the more sinuous Via Appia Nuova at Frattocchie. At this point the ancient road, which climbs imperceptibly along the paleolithic finger of lava from a volcano reaching toward Rome, begins its long steady climb up to Albano. This town is at the top of the climb (384 meters above sea level) and located on the rim of both the large crater of the volcano and of its subcrater containing the Lago d'Albano. The Via Appia passes straight through the town, acting as its congested main street before continuing on to nearby Ariccia and Genzano. Albano's long urban history of ancient expansion, Medieval contraction and Renaissance re-expansion parallels that of Rome, though clearly on a much smaller scale.

Ancient Albano

Albano is sometimes thought (erroneously) to have been the site of Alba Longa, the legendary mother town of Rome, birthplace of Romulus and Remus.¹ Historically it is known to have begun as the site of a number of late Republican villas including those of Pompey and Clodius. In the late first century AD the emperor Domitian combined some of these villas into a large imperial estate. At about 200 AD the emperor Septimius Severus stationed the second Parthian legion as a tactical reserve in a permanent camp or *castrum* which he caused to be built on part of the site of Domitian's great villa.¹ This is the element that was to determine the development of the town situated there today (see Figure 10.1).

The rectangular *castrum* (Castra Albana) was sited on a series of artificial terraces descending the steep slope between the lip of the Albano subcrater and the Via Appia (see Figure 10.2). The short side (240 m long) of the rectangular *castrum* was roughly parallel to the Via Appia, but set at 50 m from the edge of that road. The long sides (420 m long) climbed the hill and stopped about 300 m short of the rim of the crater.

A *nymphaeum* surviving from Domitian's villa was included within the circuit of walls and its location and orientation suggest that the *castrum* utilised existing terracing from that villa. The *castrum* was defended on its four sides by high towered walls laid in large blocks of local peperino (*lapis albanus*; see Figure 10.3). As in other Roman military camps there was a gate on each side, centred on the short sides but off centre on the long sides. Two of the four gates survive: the main Porta Pretoria

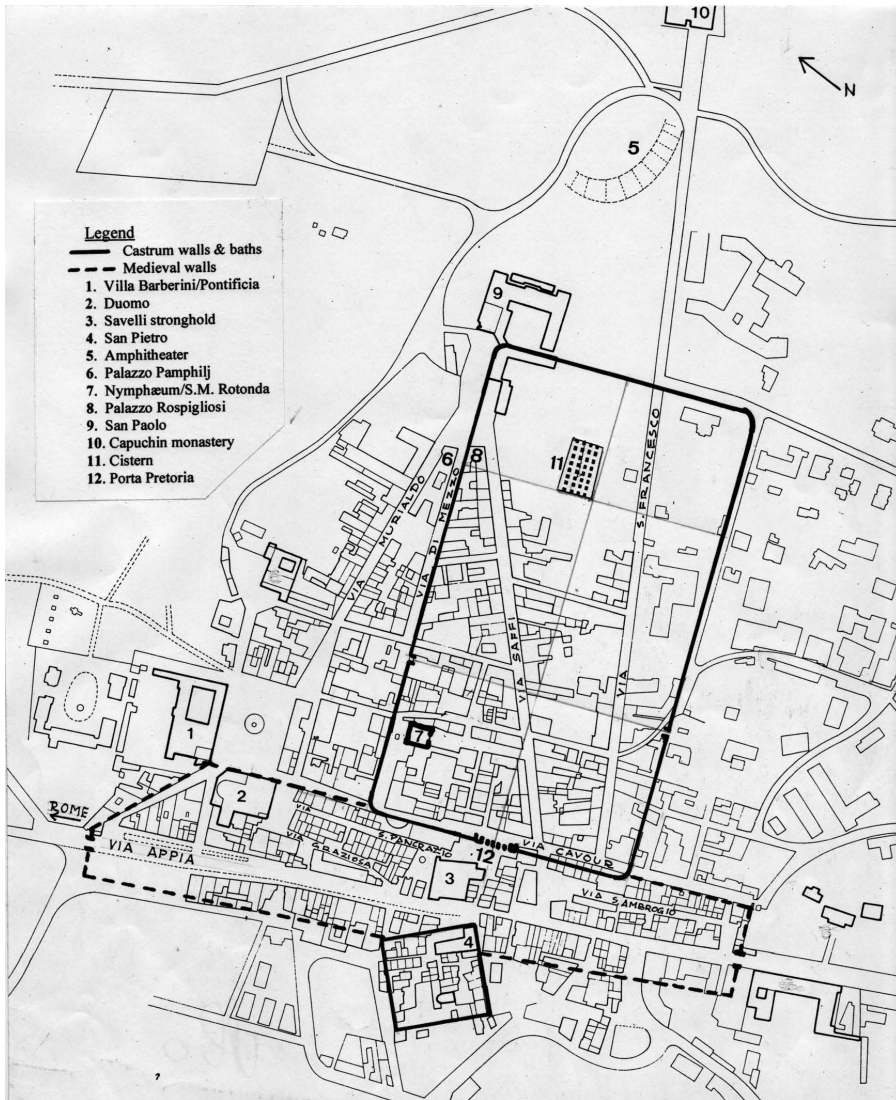


Figure 10.1 Plan of modern Albano with outline of ancient *castrum* walls and baths (solid heavy lines) and proposed outline of Medieval walls

(Figure 10.1, #12; see Figure 10.4) facing Via Appia, and the Porta Principalis Sinistra on the long south side (see Figure 10.5). Connecting the gates were two perpendicular streets, the longitudinal *decumanus* and the Via Principalis, the latter parallel to the short sides of the *castrum*. Further uphill, a third street, parallel to the Via Principalis, defined the edge of the top terrace. Its trace survives and gives access to the large cistern under the top terrace (Figure 10.1, #11; see Figure 10.6), which supplied water

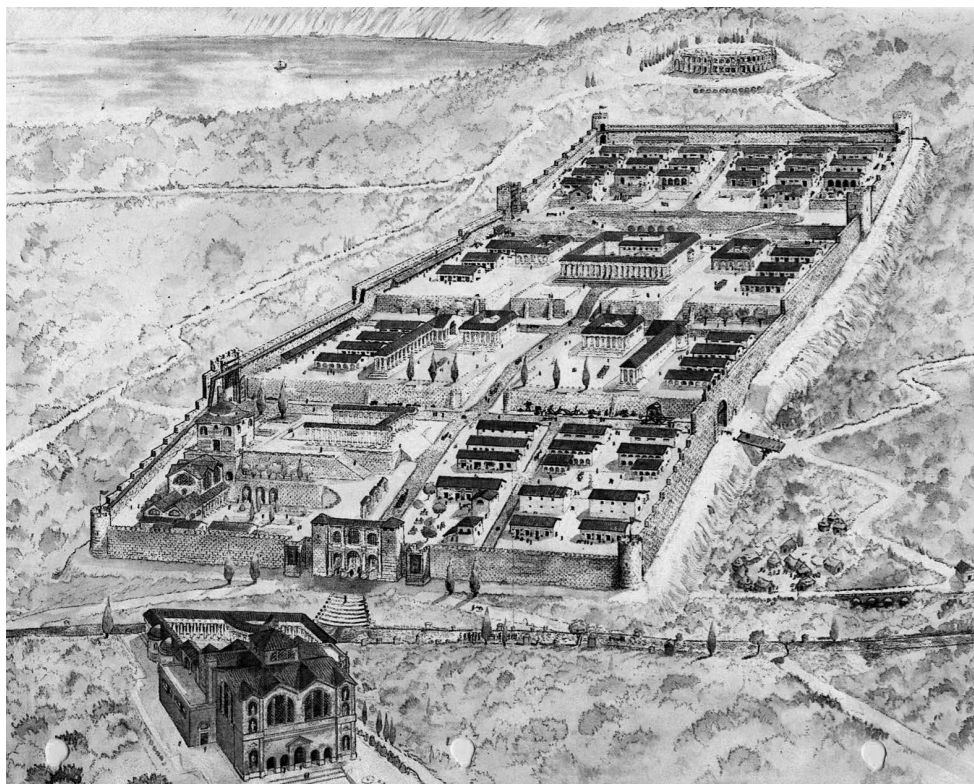


Figure 10.2 S. Chiarucci and S. Scascitelli. Reconstruction of the Castra Albana and its baths (foreground) and amphitheatre

Source: From Museo Civico, Albano.

to the *castrum* and was active as recently as 25 years ago. A road running around the outside perimeter of the walls was called the *circumductio*. Considerable parts of this road survive to this day.

Furthering his father Septimius Severus' development of the site, Caracalla built a large set of baths on a vast podium across the Via Appia from the *castrum* (see Figure 10.7 and Figure 10.8). Like the latter, this was to have an important effect on the development of the Medieval town. About the middle of the third century an amphitheatre was built between the *castrum* and the lip of the crater, half of it carved out of the hillside and half built up in masonry on an artificial terrace (see Figure 10.9 and Figure 10.10).²

In the fourth century Constantine withdrew the legion from Albano and the *castrum* declined and eventually emptied.³ But by that time an ancillary support neighbourhood serving the military camp had developed along the Via Appia, between the *castrum* and the baths (see Figure 10.11). This, together with the baths, became the Medieval town which developed along the Via Appia after the sack of the town by the Ostrogoths in the sixth century.⁴



Figure 10.3 *Castrum* walls and tower on Via Castro Partico. Original parts of wall are the large tufa blocks

Source: Author.

Medieval Albano

Medieval Italian towns tended to form on defensible hilltops rather than along Roman roads which made them vulnerable to attack. Medieval Albano is an exception to this rule. Its two early churches are close to, and on opposite sides of the Via Appia. This suggests that the location of the late antique/early Medieval settlement straddled this important artery. At an early stage the town had a set of walls which used one short side of the *castrum* as a starting point (see Figure 10.12). The Duomo (Figure 10.12, #2) is said to have been founded by Constantine and dedicated to St.



Figure 10.4 Via Alcide de Gasperi looking north toward the Duomo. The interior side of Porta Pretoria is in the left foreground

Source: Author.

John the Baptist.⁵ Little besides the nave columns is left of the fourth century church, which was rebuilt in the Baroque period and dedicated to S. Pancrazio. The other major church, the early sixth century S. Pietro (Figure 10.1, #4; see Figure 10.13), was probably the more important of the two during the Medieval period. It is situated on the corner of the great platform of the baths nearest the Via Appia. Directly across this heavily travelled road the Savelli, who gained control of Albano in the late thirteenth century, built a rectangular stronghold defended by corner towers (Figure 10.13, #3).



Figure 10.5 Interior view of *Porta Principalis Sinistra* on Via Castro Partico

Source: Author.

Because of its position on a platform with high drops on three sides, the most defensible part of the town was the Medieval quarter that was packed into the remains of the Roman baths. The rabbit warren of small streets, which is still visible in the great baths block, attests to the density of this circumscribed neighbourhood. The combination of this unit with the Savelli stronghold directly across the Via Appia must have constituted a powerfully defended check point on that highway, as well as the core of the Medieval town. The town developed linearly north and south from this centre on both sides of the Via Appia. The greater density of the houses in the section between the Savelli stronghold and the Duomo suggests that this was the more developed part of the Medieval town.

Though nothing remains of it, a wall must have encircled the Medieval town (Figure 10.12). This made use of the ready-made wall of the short side of the Roman



Figure 10.6 G.B. Piranesi, 1764. Interior view of the *castrum*'s cistern

castrum parallel to the Via Appia. That wall then extended northward to the Duomo, turned on the slanted Via Cairoli, and reached the Appia at the Porta Romana (the town gate demolished in 1905).⁶ The beveled back corner of the Baroque Duomo is evidence of the turn in the wall at that point. In the other direction (south) the *castrum* wall was probably extended to a point near the edge of Villa Ferraoli. At this point the Medieval wall must have turned to meet the Via Appia where another gate, of which no evidence remains, would have marked its crossing of the highway. On the

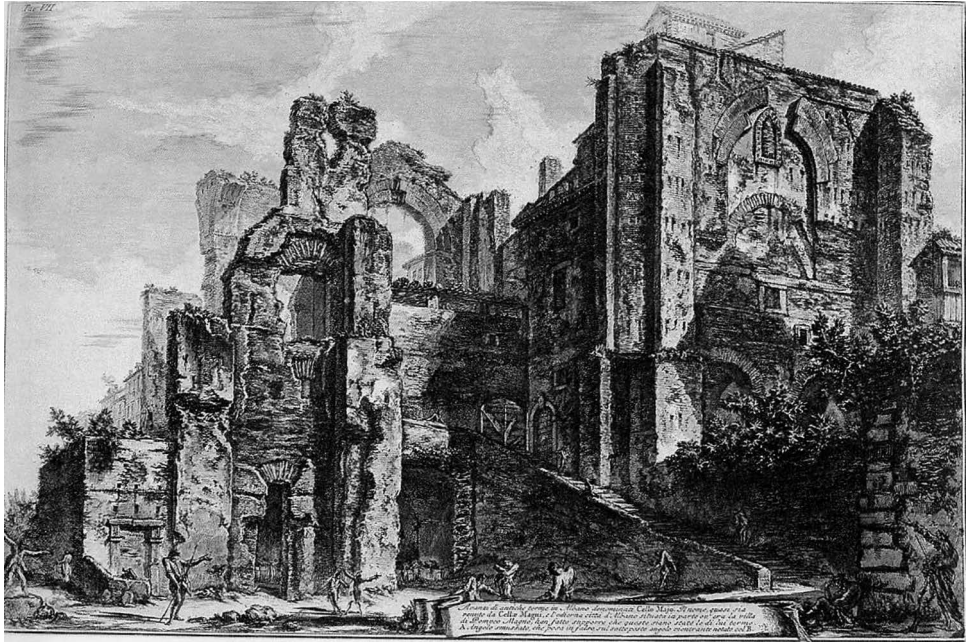


Figure 10.7 G.B. Piranesi, 1764. Ruins of the Baths built by Caracalla



Figure 10.8 Ruins of the Baths built by Caracalla in the early third century AD (See Fig. 10.7)

Source: Author.

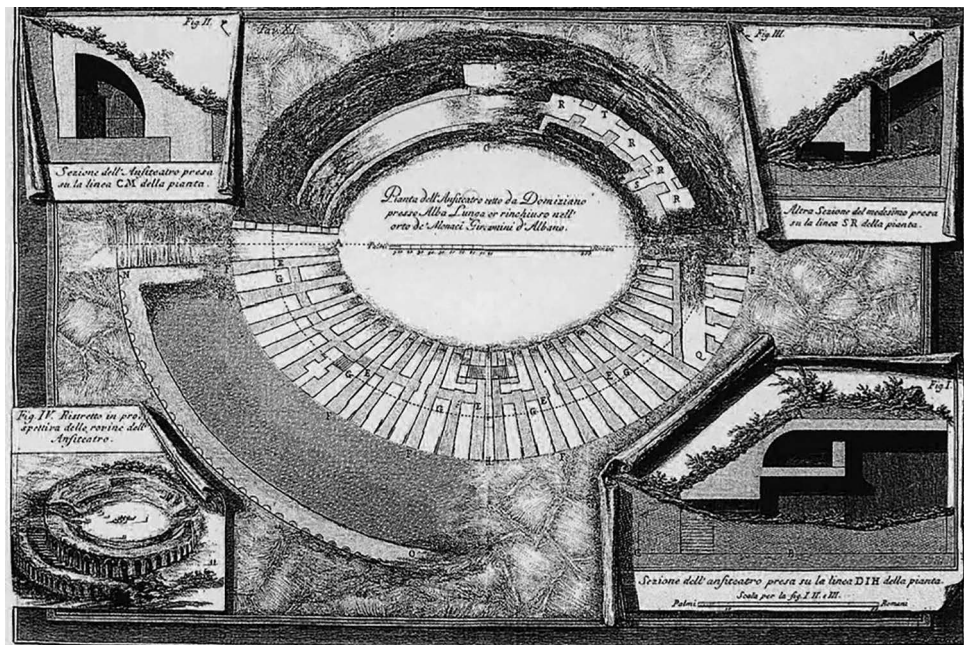


Figure 10.9 G.B. Piranesi, 1764. The mid-third century Amphitheatre

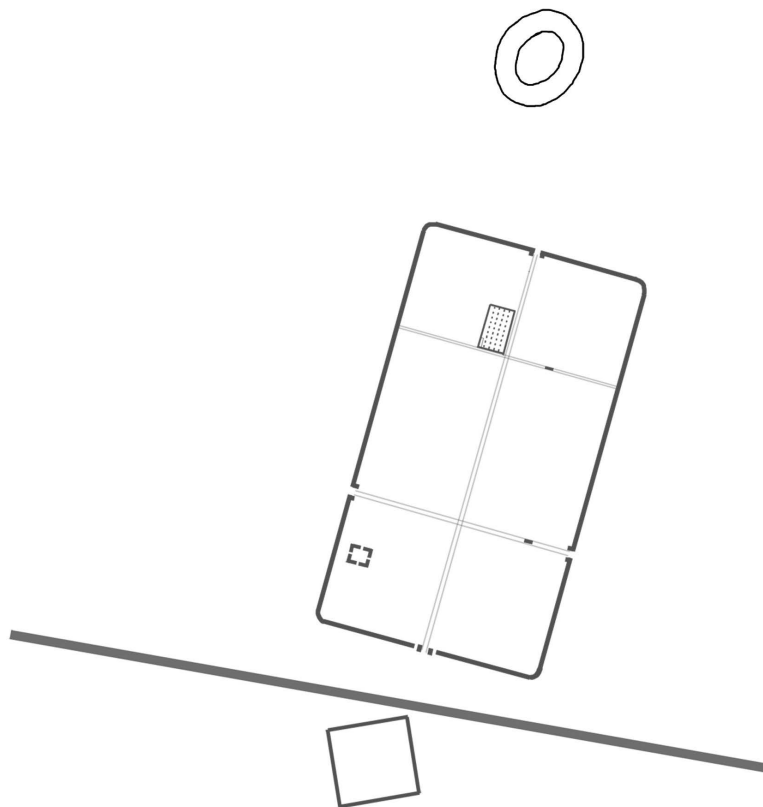


Figure 10.10 Reconstruction of the Plan of Castra Albana in the early third century AD with the Baths on the opposite side of Via Appia, and the Amphitheatre

Source: Photo author.

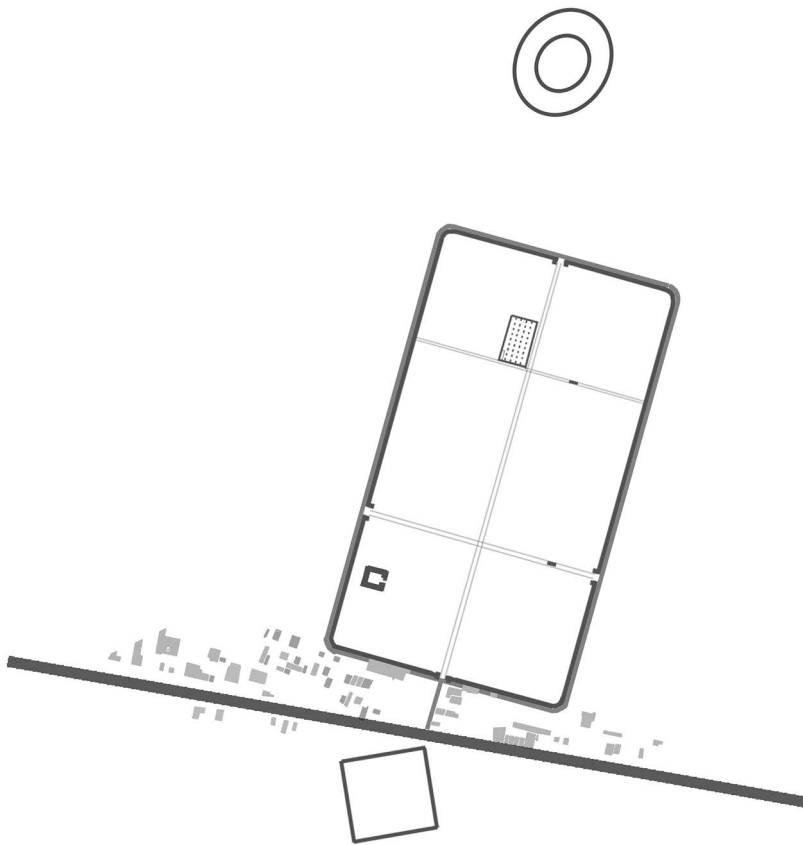


Figure 10.11 Reconstruction of the Plan of Castra Albana in the early fifth century AD with the service town that developed between the *castrum* and Via Appia

Source: Author.

west side of town the steep drop away from Via Appia must itself have constituted a defensive barrier, probably consisting of a retaining wall paralleling the highway and running up to both sides of the baths block.

Medieval Albano's street system was remarkably simple (see Figure 10.14). Via Appia was the main street, widening into a large piazza (Piazza Cellamaio, later reduced) located between the Savelli palace and S. Pietro. Not far from this piazza Via Graziosa slanted away from the Via Appia to a corner of the Piazza del Duomo. Another street, which aligned with the main door of the Duomo, ran parallel to the Via Appia to the corner of the Savelli stronghold (see Figure 10.15). This axis continued south after an interruption as Via S. Ambrogio. Short cross streets, perpendicular to the Via Appia, provided connections between these longitudinal streets. The only aberration to this elongated grid was the complex alleyway system occupying the great baths. This unit, consisting of a large square platform turned at an angle of about 17° with respect to the Via Appia, connects with Piazza Cellamaio by means of a wide space behind the church of S. Pietro, whose main door formerly opened onto it.

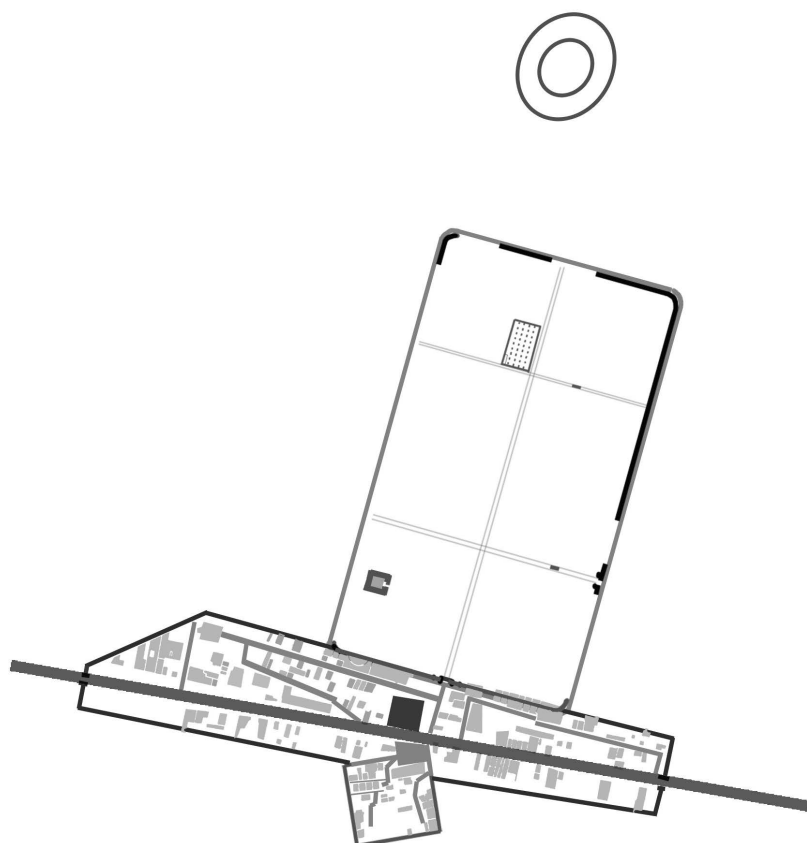


Figure 10.12 Reconstruction of the Plan of Albano in the late middle ages

Source: Author.

Later Medieval presences outside the walls of the Medieval borgo suggest some ancient survivals as well as the very gradual expansion of the town up the hill, in the area of the largely empty *castrum*. The principal example of this is the church of S. Maria della Rotonda (Figure 10.14, #7) built into the nymphaeum surviving from the Villa of Domitian and turned into a bath house by Septimius Severus. This structure lies within the *castrum* near the angle between the short wall paralleling the Via Appia and the long north wall facing Rome. Running just inside the short *castrum* wall (therefore outside the Medieval wall), and obviously determined by it, is the Via de Gasperi/Via Cavour axis. Interestingly, this street replaced that section of the *circumductio* which paralleled the Via Appia outside the *castrum* wall. This change of sides of a street with respect to the wall is easily explained: When the wall of the *castrum* became the wall of the Medieval town which grew up outside the *castrum*, the *circumductio* street became a space interior to the Medieval town, and as often happened in crowded quarters, it was gradually occupied by houses built right up against the wall. Eventually the wall was enveloped by these houses and disappeared completely. Later



Figure 10.13 S. Pietro on Piazza Cellamaio

Source: Author.



Figure 10.14 Early Renaissance street system of Albano

Source: Author.



Figure 10.15 Via S. Pancrazio aligned on the main door of the Duomo

Source: Author.

the houses were turned to face the new (uphill) section of town and had facades built on what became the street in its present location.

Renaissance Albano

The sixteenth century marked the beginning of renewed interest in the Alban hills on the part of the Roman nobility as a location for exurban summer villas. This stimulated

the expansion of Albano not only because it brought the need for housing for people servicing these villas, but also because some of the noble families built villas right next to the town (as occurred at Frascati) as well as palazzi within the town. Thus Villa Barberini (Figure 10.16, #1; now Villa Pontificia), Villa Doria, and Villa Altieri are built next to the town, while Palazzo Rospigliosi (8), Palazzo Doria (6), and Palazzo Corsini are built within the town (see Figure 10.16). The connection of all of these names with Papal families should be noted in this context. The Via de Gasperi/Cavour axis became the base for a triangular extension of the town extending up toward the crater rim. Half of this triangle fell within the area of the former castrum and the other half materialised outside of it. In the late sixteenth century, Albano adopted the trivium, a formal planning device used in Rome at the beginning of the same century.⁷

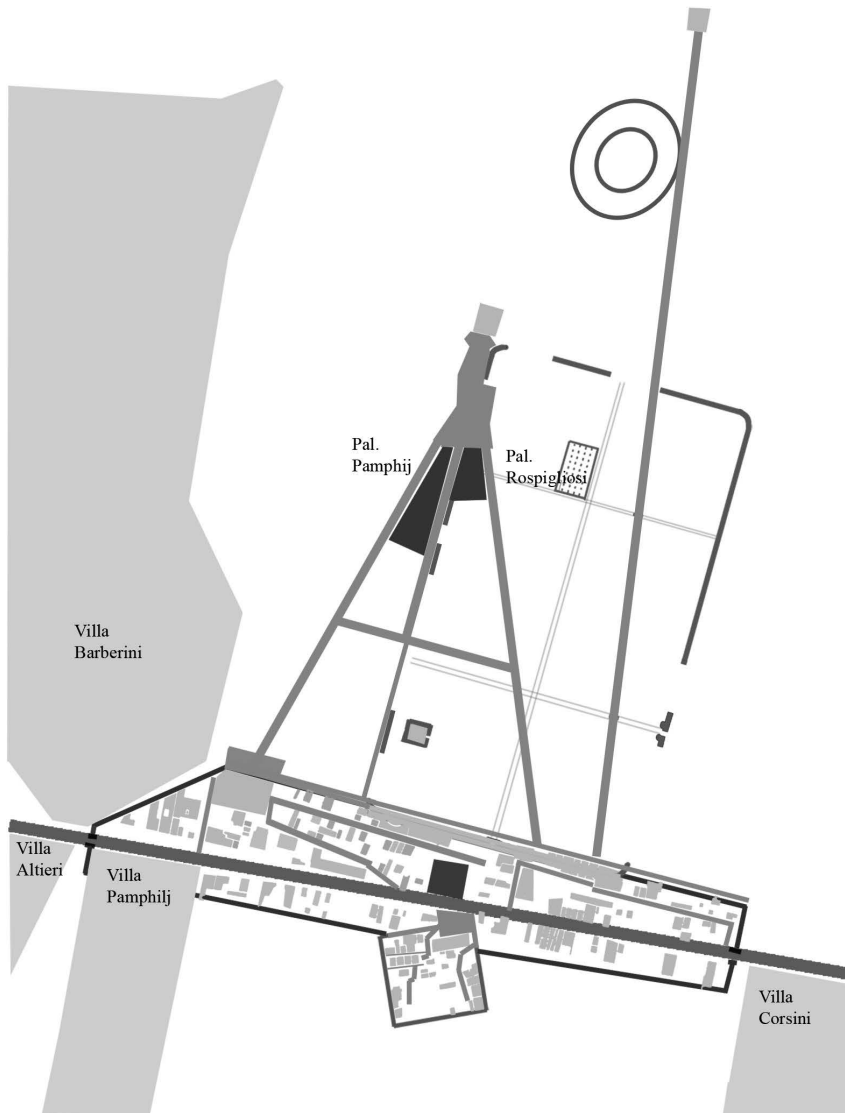


Figure 10.16 Reconstruction of the Plan of Albano in the eighteenth century

Source: Author.

The first formal *trivium* in Rome (1517–1540) was that at Piazza del Popolo: three streets converging on a piazza at equal acute angles of 23.5° . The existing Via del Corso (ancient Via Flaminia) became the axis of symmetry for the two new streets converging with it at Piazza del Popolo. On axis with the Corso, at the end of the then trapezoidal piazza, stood a major element: Porta del Popolo, later elaborated into a sort of triumphal arch by Bernini.

Half a century after this scheme was developed in Rome, the same planning configuration began to appear in towns around Rome (Albano, Genzano, Bagnaia). Albano's *trivium* is perhaps the most impressive version of the three, partly because of its large scale. The similarity of its parts with the Piazza del Popolo *trivium* is remarkable. Like the Via del Corso, the existing centre street was a Roman one. Via S. Gaspare del Bufalo (formerly Via di Mezzo) was the section of the *circumductio* following the long wall on the north side of the rectangle. Two new streets, converging with Via di Mezzo at Piazza S. Paolo, echo Rome's Via Ripetta and Via del Babuino converging on Piazza del Popolo. These are Via Leonardo Murialdo and Via Aurelio Saffi. The focal point of the converging streets in Albano is the piazza in front of the thirteenth century church of S. Paolo (Figure 10.17, #9; see Figure 10.17), located next to one corner of the Roman *castrum*. This echoes Rome's Porta del Popolo in the *trivium* scheme. Just as awareness of the *trivium* configuration in Rome is reflected in the name of Via Paolina Trifaria (three-way), similarly Albano's Via di Mezzo (literally 'middle street') suggests that the concept of the *trivium* was clearly understood. This is confirmed by an early nineteenth century cadastral map which names the three streets as Strada Prima di S. Paolo, Strada Seconda di S. Paolo and Strada Terza di S. Paolo.



Figure 10.17 Trivium convergence point at Piazza S. Paolo. Via Saffi left; Via di Mezzo centre; Via Murialdo right

Source: Author.

The angle between the Via di Mezzo and Via Saffi is about 23° , almost the same as that of the two Piazza del Popolo angles in Rome. However, the angle between Via Murialdo and the Via di Mezzo is only 15° . This angular difference reflects the type of adjustment of a formal urban design pattern to fit local needs that can be noted in another *trivium* in Rome, the Banchi *trivium*. In Banchi one of the flanking streets was aimed at the centre door of a church (S. Giovanni dei Fiorentini) while the other was so directed as to bypass the corner of Palazzo Orsini/Taverna. At Albano the smaller angle is probably due to an attempt to maintain equal and constant pitches for the two flanking streets so that they could tie in to the two ends of the level Via de Gasperi/Cavour: had the angles been the same, Via Murialdo would have encountered much higher ground, resulting either in an undulating street or in a considerable amount of earth moving so as to maintain the necessary pitch. Avoiding this, the street was aimed at the centre of the side of the Duomo. This also had the advantage of leading to the town's market square, Piazza Sabatini (formerly Piazza Roma) which is located next to the flank of the Duomo.

From the plans of the buildings built along the three *trivium* streets, we can deduce that the two new streets received more attention than the Via di Mezzo because nearly all the buildings were built with walls perpendicular to these two streets. The result was that the same buildings, or their extensions, meet the street front of Via di Mezzo at odd angles.

Another long straight Renaissance street leaving from the Via de Gasperi/Cavour axis leads up the hill through the *castrum* to the 1619 church and monastery of the Cappuccini perched on the rim of the crater. Besides Via di Mezzo and Via DeGasperi/Cavour, two other streets in the present town follow the exact trace of the Roman *castrum*'s *circumductio*: the first section of Via Tacito and the straight section of Via Castro Partico. As on the Via di Mezzo numerous sections of the *castrum*'s walls are visible in the facades of the buildings lining these streets. Thus, all four of the *castrum* walls determine streets in the modern town.

Baroque Albano

The Renaissance *trivium* received its major buildings in the Baroque period (Figure 10.16). Piazza S. Paolo acquired its current appearance at that time. At the head of the trapezoidal site between Via A. Saffi and Via di Mezzo is the mid-seventeenth century Palazzo Rospigliosi (Figure 10.1, #8) with its main entrance on the piazza. Somewhat later on the narrower trapezoid between Via Murialdo and Via di Mezzo, the Pamphilj family built a much larger palazzo complete with a garden (Figure 10.1, #6; see Figure 10.18). The short end faces on to Piazza S. Paolo, but its main entrance is in the longer façade on Via Murialdo, while the garden entrance is on Via di Mezzo. It is currently in a state of complete abandonment.

On what is now Piazza Mazzini the same family built a villa with its main building facing the Via Appia, and its gardens occupying the site of Pompey's villa on the down-hill side (see Figure 10.19). Nothing remains of the building, which was bombed during WWII, but the gardens are now Albano's public park. Villa Pamphilj was located just inside Porta Romana. Villa Altieri, developed in the early eighteenth century from a large seventeenth century *casale* or farmhouse, is situated on the Via Appia just outside the site of Porta Romana (Figure 10.19). It is now a hotel. Directly across the Via Appia from the entrance to Villa Altieri is the entrance to the Villa Barberini, which

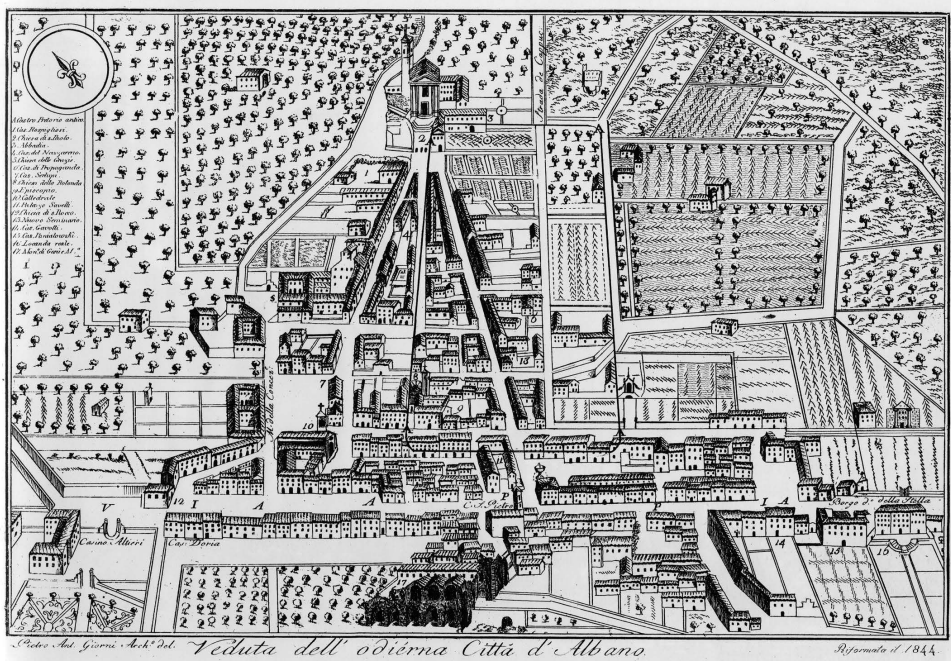


Figure 10.18 Pietro Antonio Giorni. 1844 reprint of a 1787 print of Albano, after R. Mam-
 mucari, *I Castelli Romani*. The only nineteenth-century addition to this print is
 the building at extreme right centre, Villa Ferrajoli, depicted as a two-dimensional
 façade

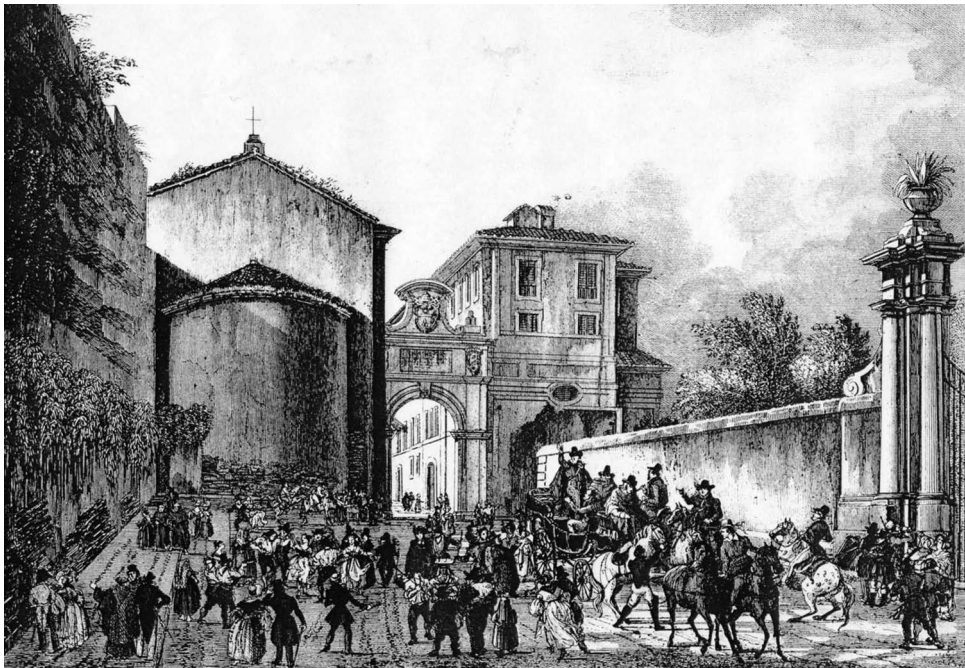


Figure 10.19 Luigi Rossini. 1830 print of Porta Romana and the apse of S. Rocco; the gate
 bears the coat-of-arms of Clement XI Albani; to the left of the gate is the Palazzo
 Pamphilj, and at far right is the gate of Villa Altieri

covered a vast area along the crater rim between Albano and Castel Gandolfo (Figure 10.16). It is now part of the Villa Pontificia, the pope's summer residence.

In the early eighteenth century the Corsini built a palazzo at the other end of town, also facing the Via Appia (Figure 10.16). In the same period the Porta Romana was restored under pope Clement XI Albani (Figure 10.19). Across the Via Appia from Palazzo Corsini the Neoclassical Casino Benucci built in 1834 was later enlarged into the Villa Ferrajoli, now the Museo Civico (Figure 10.16). The town underwent little change in the nineteenth century.

Modern Albano

In 1905 the Porta Romana was demolished to allow the tramway from Rome to reach into the town (Figure 10.19). At the same time the 1660s church of S. Rocco, located next to the gate, was destroyed. Albano suffered heavily from Allied bombing in 1944 after the Anzio beachhead was established. As an unexpected result, some important ancient Roman elements resurfaced, chief among them being the Porta Pretoria, the main gate of the *castrum* (Figure 10.4). Post-war reconstruction did not alter the pattern of streets of the historic town. The recently built extension of the town lies on the east side of the Via Appia between Albano and Ariccia on a series of curvilinear streets loosely connected to the old town.

The Via Appia remains the main street of Albano, and is still the major traffic street lined with shops. An endless stream of through traffic makes it very unpleasant to walk along this route, which should be the main pedestrian way. Clearly a vehicular bypass was called for and is now being built in the valley below the town.

The historic town provides a near-perfect example of urban development over an arc of 2,000 years, but yet remains to be studied in any detail. The present study is a first attempt to illuminate the unusual history of this urban complex, which differed considerably from numerous other towns that grew out of ancient Roman *castrum* plans. In the latter the original rectangular grid normally remained the centre of the later town or city, with newer streets radiating from it. Instead, Albano, first grew away from the original *castrum* grid, then later enveloped it with a changed geometrical scheme. The overlapping yet easily distinguishable ancient, Medieval, and Renaissance/Baroque sections of Albano today present an unusual town plan, proving once more the adaptability of the ancient Roman *castrum* plan.

Notes

- 1 Lugli 1922, 9.
- 2 Lugli 1921, 253.
- 3 de Amicis 2002, 50.
- 4 Feliciani 2006, 100.
- 5 Paris, *op.cit.*, 256.
- 6 Mammucari and Nabiloni 1988, 18.
- 7 Ceen 1986, Chapter 3.

Bibliography

- Ceen, A. 1986. *The Quartiere de' Banchi: Urban Planning in Rome in the First Half of the Cinquencento*. New York: Garland.
- de Amicis, A.R. 2002. "Albano." In *Atlante del Barocco in Italia, Lazio I, Provincia di Roma*. Roma: De Luca.

Feliciani, C. 2006. *Albanum*. Albano.

Lugli, G. 1921. "L'anfiteatro d'Albano dopo I recenti scavi." In *Castra Albana II*. Rome: Garroni.

Lugli, G. 1922. *La Villa di Domiziano su i colli Albani*. Rome: Maglioni e Strini.

Mammucari, R., and N. Nobile. 1988. *I Castelli Romani: immagini dal passato*. Rome: Newton Compton.

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